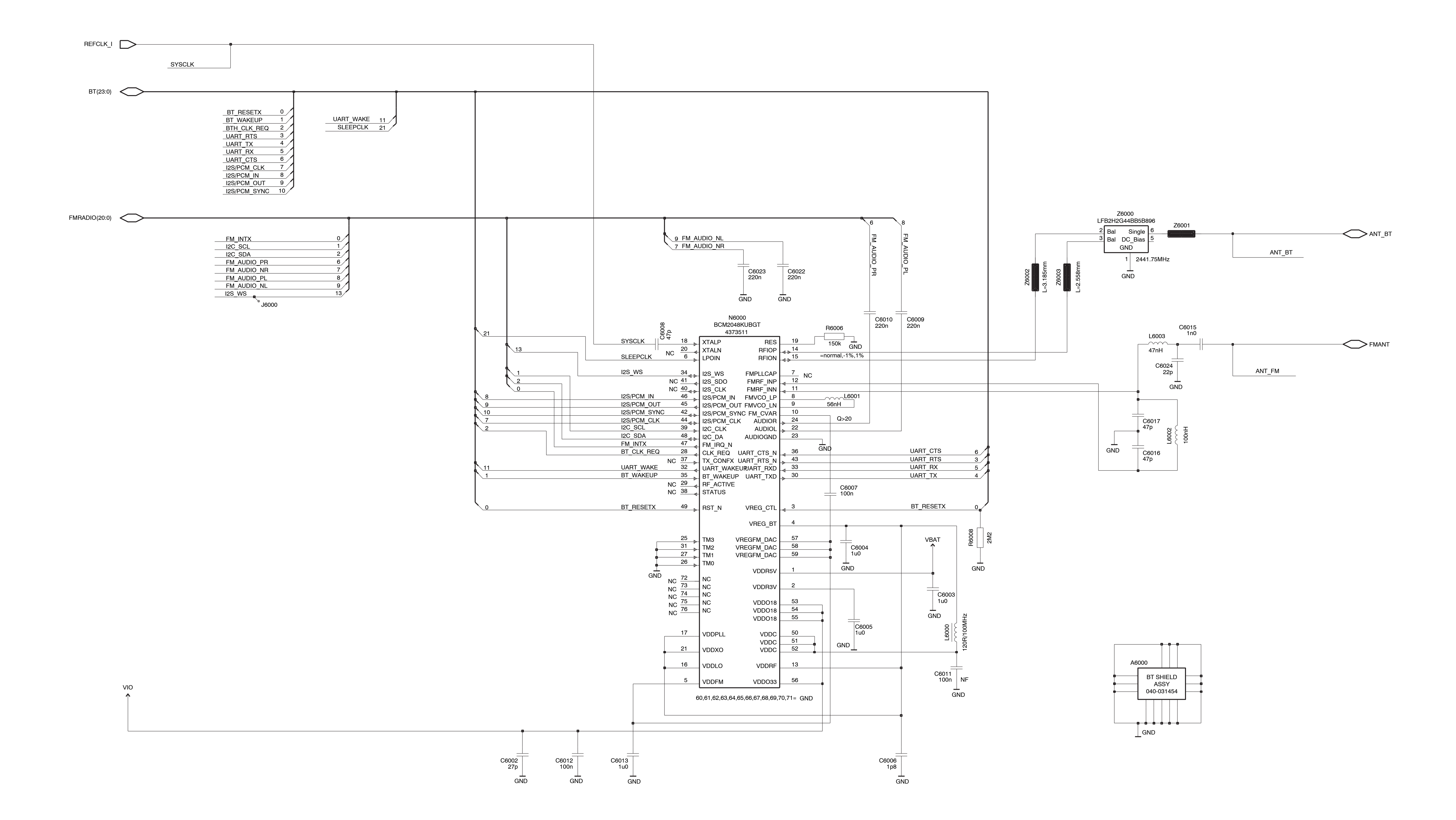
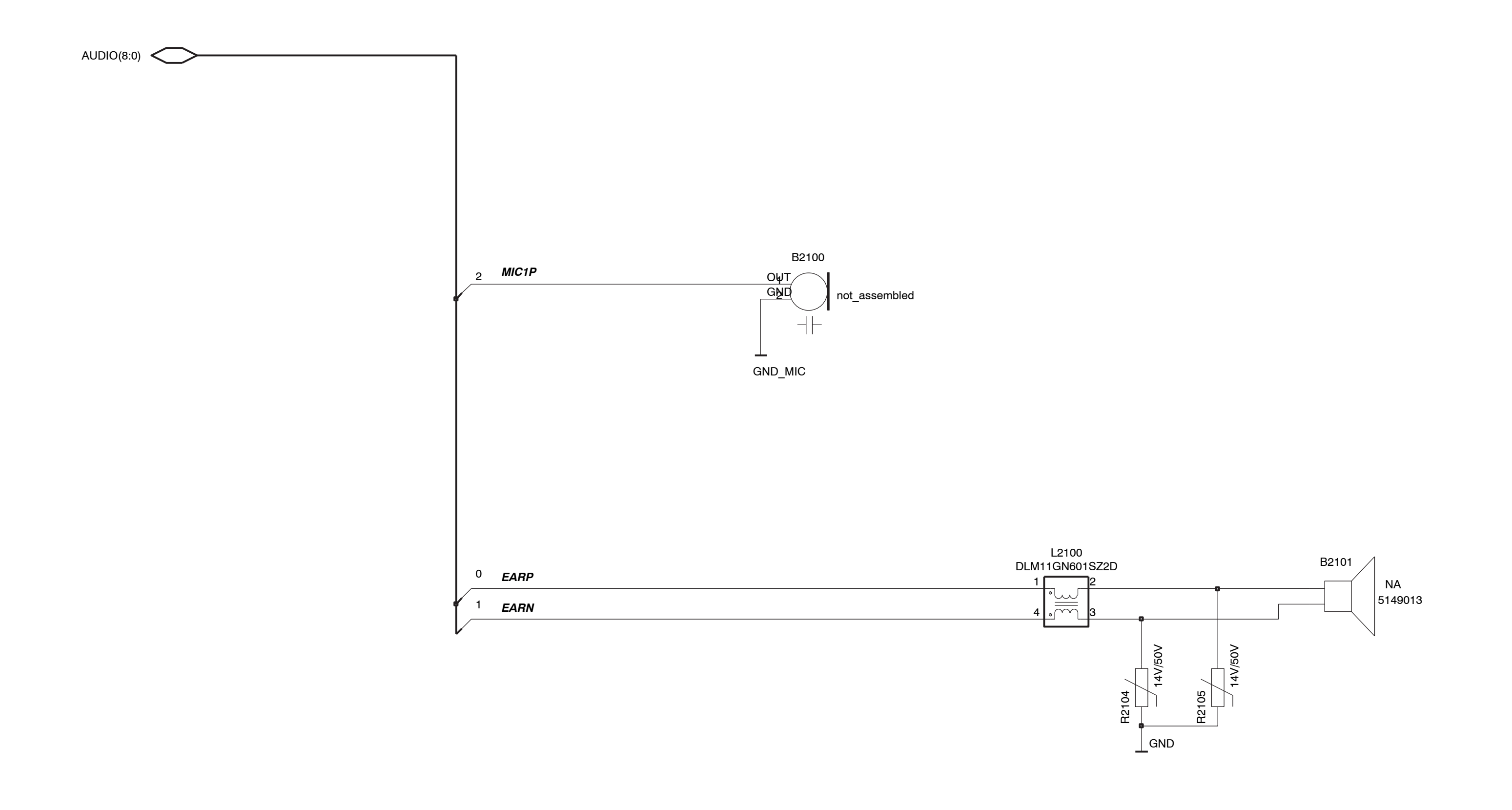
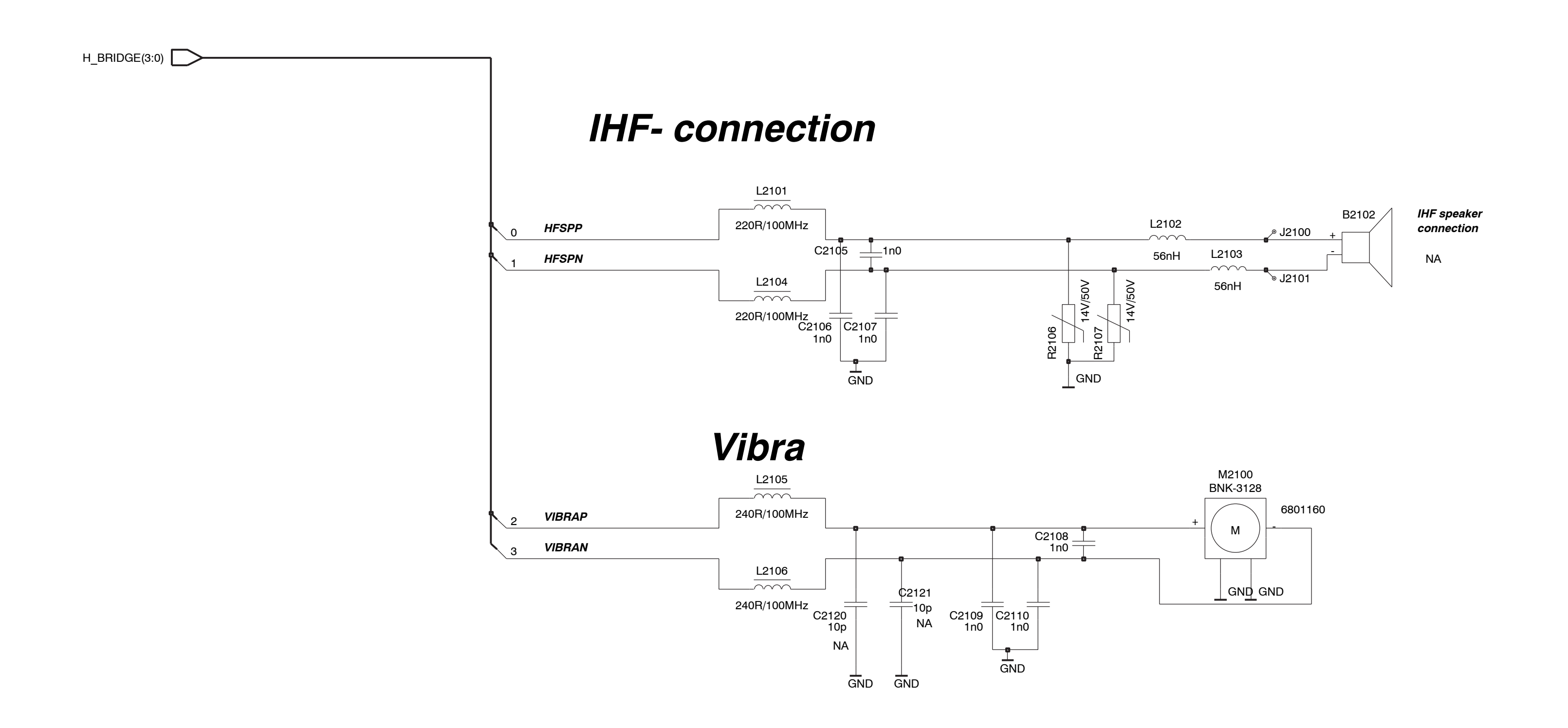


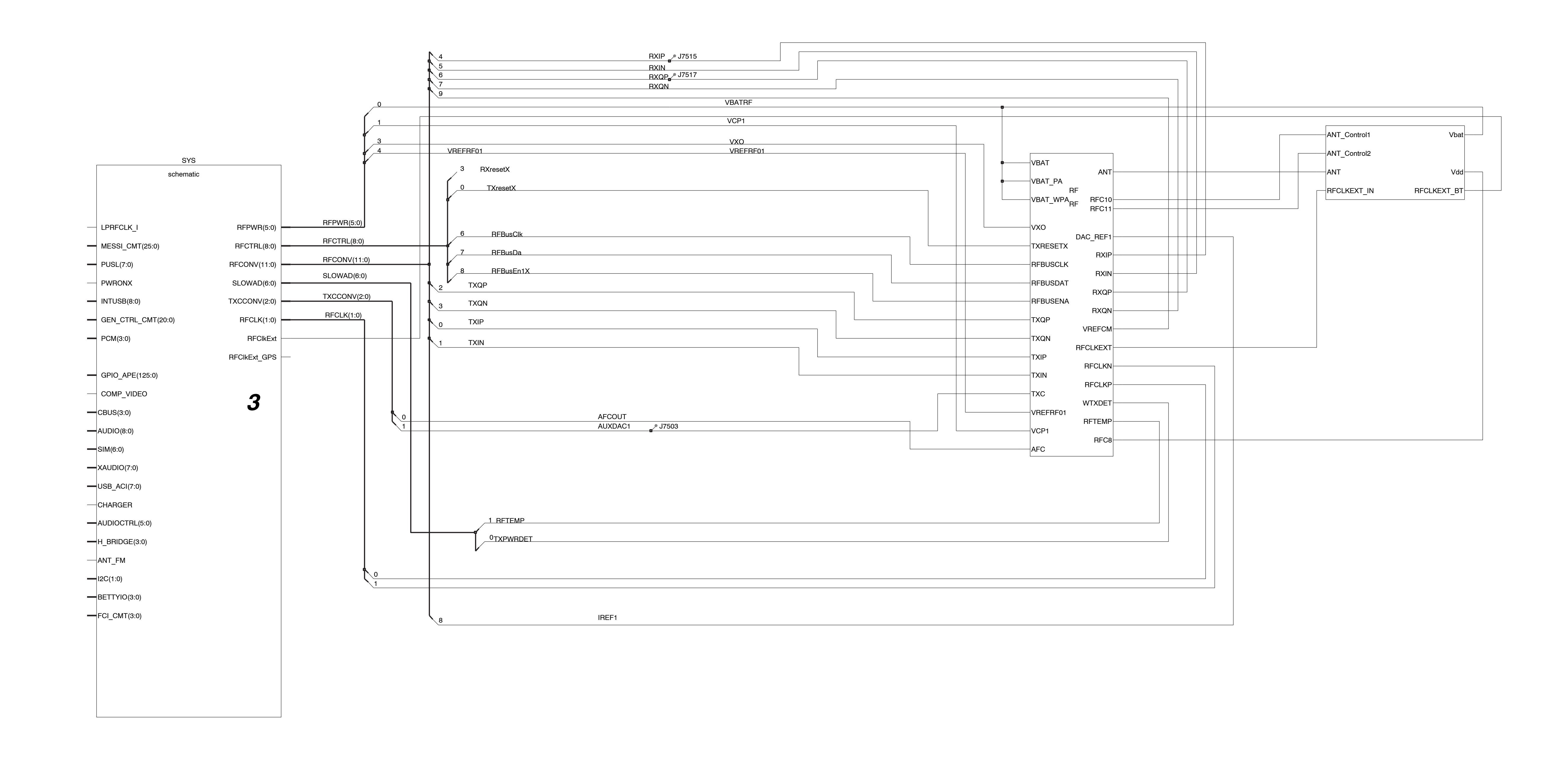
REFCLK_I
SYSCLK
BT(23:0)
BT_RESETX 0
BT_WAKEUP 1
BTH_CLK_REQ 2
UART_RTS 3
UART_TX 4
UART_RX 5
UART_CTS 6
I2S/PCM_CLK 7
I2S/PCM_IN 8
I2S/PCM_OUT 9
I2S/PCM_SYNC 10
UART_WAKE 11
SLEEPCLK 21
FMRADIO(20:0)
FM_INTX 0
I2C_SCL 1
I2C_SDA 2
FM_AUDIO_PR 6
FM_AUDIO_NR 7
FM_AUDIO_PL 8
FM_AUDIO_NL 9
I2S_WS 13
J6000
FM_AUDIO_NL
FM_AUDIO_NR
C6023 220n
C6022 220n
FM_AUDIO_PR
FM_AUDIO_PL
C6010 220n
C6009 220n
N6000
BCM2048KUBGT
4373511
C6008 47p
R6006 150k
=normal,-1%,1%
L6001 56nH
Q>20
C6007 100n
XTALP
XTALN
LPOIN
I2S_WS
I2S_SDO
I2S_CLK
I2S/PCM_IN
I2S/PCM_OUT
I2S/PCM_SYNC
I2S/PCM_CLK
I2C_CLK
I2C_DA
FM_IRQ_N
CLK_REQ
TX_CONFX
UART_WAKEUP
BT_WAKEUP
RF_ACTIVE
STATUS
RST_N
RES
RFIOP
RFION
FMPLLCAP
FMRF_INP
FMRF_INN
FMVCO_LP
FMVCO_LN
FM_CVAR
AUDIOR
AUDIOL
AUDIOGND
UART_CTS_N
UART_RTS_N
UART_RXD
UART_TXD
VREG_CTL
VREG_BT
VREGFM_DAC
VDDR5V
VDDR3V
VDDO18
VDDC
VDDRF
VDDO33
TM3
TM2
TM1
TM0
NC
VDDPLL
VDDXO
VDDLO
VDDFM
60,61,62,63,64,65,66,67,68,69,70,71= GND
UART_CTS 6
UART_RTS 3
UART_RX 5
UART_TX 4
BT_RESETX 0
R6008 2M2
VBAT
C6004 1u0
C6003 1u0
C6005 1u0
L6000 120R/100MHz
C6011 100n NF
VIO
C6002 27p
C6012 100n
C6013 1u0
C6006 1p8
GND
Z6000
LFB2H2G44BB5B896
Bal Single
Bal DC_Bias
GND
2441.75MHz
Z6001
ANT_BT
Z6002 L=3.185mm
Z6003 L=2.558mm
L6003 47nH
C6015 1n0
FMANT
C6024 22p
ANT_FM
C6017 47p
C6016 47p
L6002 100nH
A6000
BT SHIELD
ASSY
040-031454

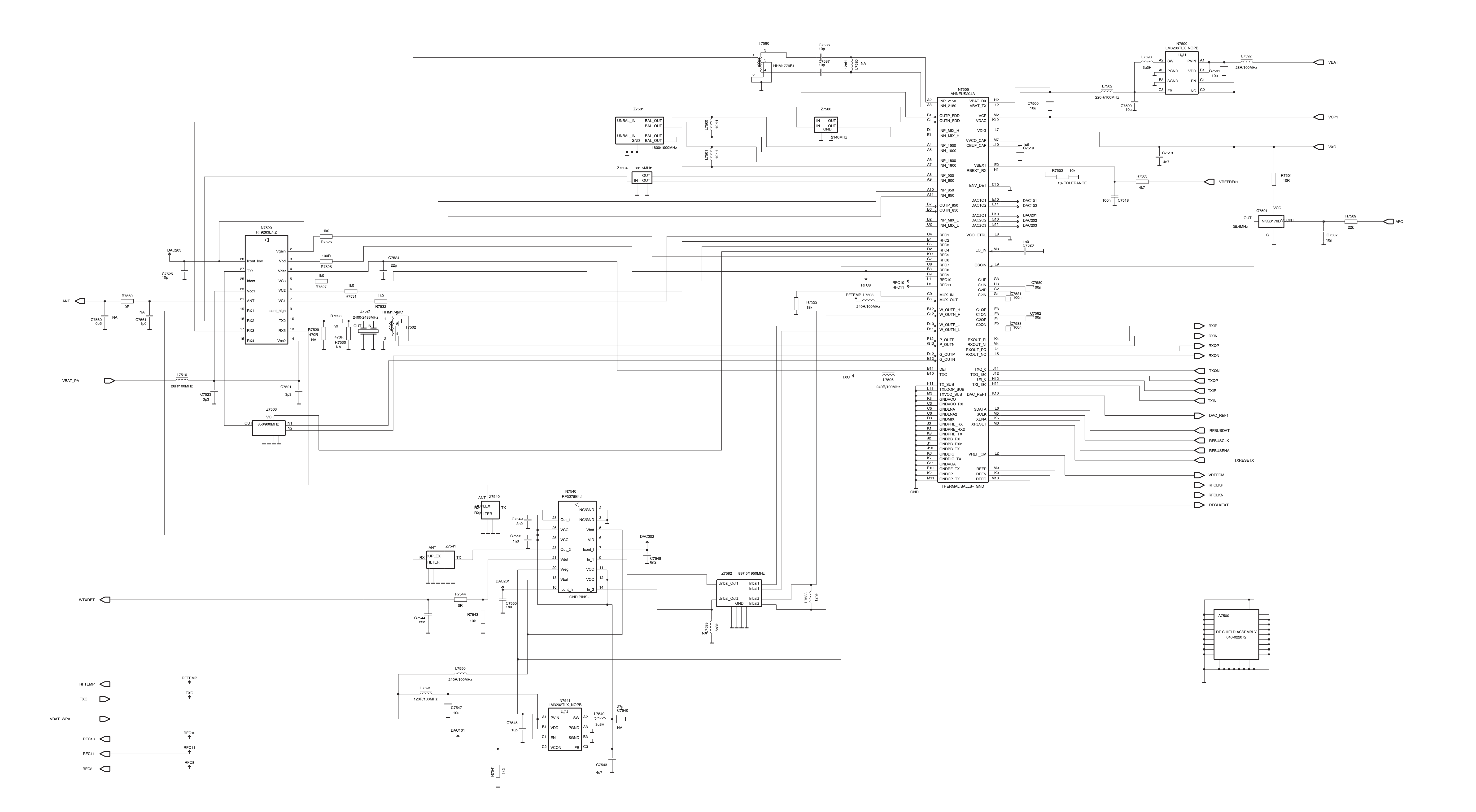


AUDIO(8:0)
2
MIC1P
B2100
OUT
GND
not_assembled
GND_MIC
0
EARP
1
EARN
L2100
DLM11GN601SZ2D
B2101
NA
5149013
R2104
14V/50V
R2105
14V/50V
GND

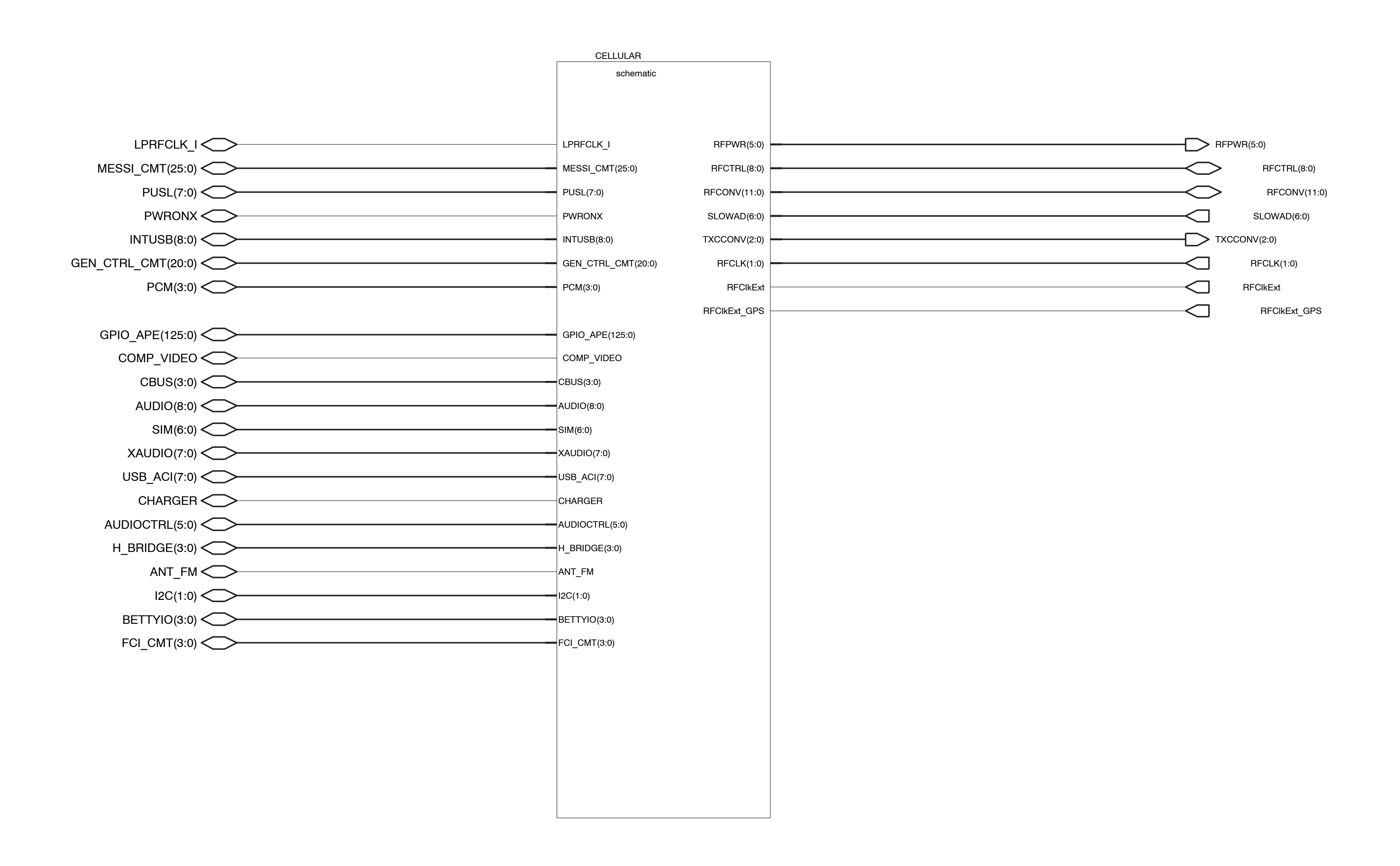


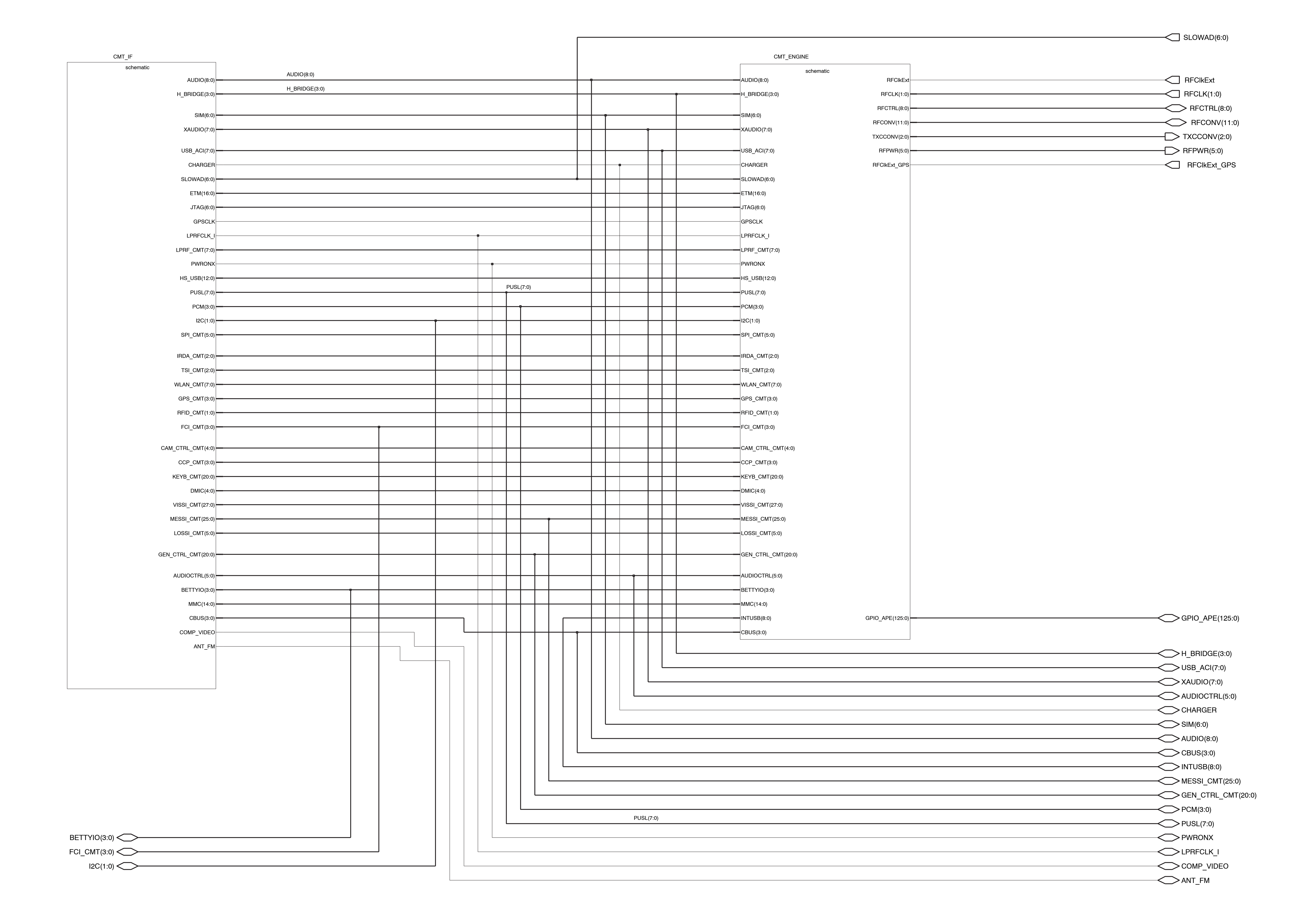
H_BRIDGE(3:0)
IHF- connection
L2101
220R/100MHz
0
HFSPP
1
HFSPN
C2105
1n0
L2104
220R/100MHz
C2106
1n0
C2107
1n0
GND
R2106
14V/50V
R2107
14V/50V
GND
L2102
56nH
L2103
56nH
J2100
J2101
B2102
IHF speaker connection
NA
Vibra
L2105
240R/100MHz
2
VIBRAP
3
VIBRAN
L2106
240R/100MHz
C2120
10p
NA
C2121
10p
NA
C2109
1n0
C2110
1n0
C2108
1n0
GND
M2100
BNK-3128
6801160
M
GND
GND

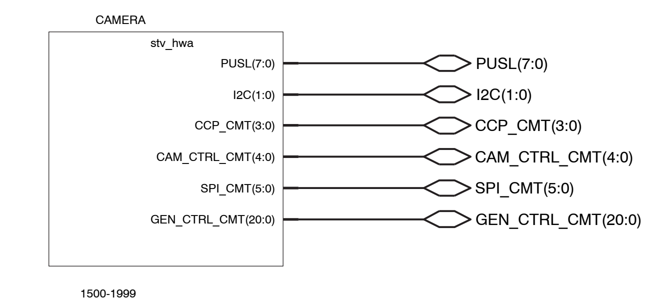

SYS
schematic
3
LPRFCLK_I
MESSI_CMT(25:0)
PUSL(7:0)
PWRONX
INTUSB(8:0)
GEN_CTRL_CMT(20:0)
PCM(3:0)
GPIO_APE(125:0)
COMP_VIDEO
CBUS(3:0)
AUDIO(8:0)
SIM(6:0)
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
AUDIOCTRL(5:0)
H_BRIDGE(3:0)
ANT_FM
I2C(1:0)
BETTYIO(3:0)
FCI_CMT(3:0)
RFPWR(5:0)
RFCTRL(8:0)
RFCONV(11:0)
SLOWAD(6:0)
TXCCONV(2:0)
RFCLK(1:0)
RFClkExt
RFClkExt_GPS
RXIP J7515
RXIN
RXQP J7517
RXQN
VBATRF
VCP1
VXO
VREFRF01
RXresetX
TXresetX
RFBusClk
RFBusDa
RFBusEn1X
TXQP
TXQN
TXIP
TXIN
AFCOUT
AUXDAC1 J7503
RFTEMP
TXPWRDET
IREF1
VBAT
VBAT_PA
VBAT_WPA
TXRESETX
RFBUSCLK
RFBUSDAT
RFBUSENA
TXC
VREFRF01
AFC
ANT
RF
RFC10
RFC11
DAC_REF1
RXIP
RXIN
RXQP
RXQN
VREFCM
RFCLKEXT
RFCLKN
RFCLKP
WTXDET
RFTEMP
RFC8
ANT_Control1
ANT_Control2
ANT
RFCLKEXT_IN
Vbat
Vdd
RFCLKEXT_BT



T7580
HHM1779B1
C7586
10p
C7587
10p
L7580
12nH
NA
N7590
LM3206TLX_NOPB
L7590
3u3H
L7592
28R/100MHz
C7591
10u
VBAT
N7505
AHNEUS204A
C7500
10u
L7502
220R/100MHz
C7590
10u
VCP1
VXO
C7513
4n7
Z7501
UNBAL_IN
BAL_OUT
GND
1800/1900MHz
L7500
12nH
L7501
12nH
Z7580
2140MHz
Z7504
881.5MHz
R7502
10k
1% TOLERANCE
R7503
4k7
VREFRF01
C7518
100n
R7501
10R
G7501
NKG3176D
38.4MHz
R7509
22k
AFC
C7507
10n
N7520
RF9283E4.2
DAC203
C7525
10p
R7526
1k0
R7525
100R
C7524
22p
R7527
1k0
R7531
1k0
R7532
1k0
ANT
R7560
0R
C7560
0p5
NA
C7561
1p0
R7528
0R
R7529
470R
R7530
470R
Z7521
2400-2483MHz
HHM1749K1
T7502
RFC8
RFC10
RFC11
RFTEMP
L7503
240R/100MHz
R7522
18k
C7520
1n0
C7580
100n
C7581
100n
C7582
100n
C7583
100n
RXIP
RXIN
RXQP
RXQN
TXQN
TXQP
TXIP
TXIN
DAC_REF1
RFBUSDAT
RFBUSCLK
RFBUSENA
TXRESETX
VREFCM
RFCLKP
RFCLKN
RFCLKEXT
TXC
L7506
240R/100MHz
THERMAL BALLS= GND
GND
VBAT_PA
L7510
28R/100MHz
C7523
3p3
C7521
3p3
Z7503
850/900MHz
Z7540
DUPLEX FILTER
N7540
RF3278E4.1
C7549
8n2
C7553
1n0
DAC202
C7548
8n2
Z7541
DUPLEX FILTER
GND PINS=
Z7582
897.5/1950MHz
L7588
12nH
L7589
6n8H
WTXDET
R7544
0R
C7544
22n
R7543
10k
DAC201
C7550
1n0
A7500
RF SHIELD ASSEMBLY
040-022072
RFTEMP
TXC
VBAT_WPA
RFC10
RFC11
RFC8
L7550
240R/100MHz
L7591
120R/100MHz
C7547
10u
N7541
LM3202TLX_NOPB
C7545
10p
L7540
3u3H
C7540
27p
NA
DAC101
R7541
1k2
C7543
4u7


CELLULAR
schematic
LPRFCLK_I
MESSI_CMT(25:0)
PUSL(7:0)
PWRONX
INTUSB(8:0)
GEN_CTRL_CMT(20:0)
PCM(3:0)
GPIO_APE(125:0)
COMP_VIDEO
CBUS(3:0)
AUDIO(8:0)
SIM(6:0)
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
AUDIOCTRL(5:0)
H_BRIDGE(3:0)
ANT_FM
I2C(1:0)
BETTYIO(3:0)
FCI_CMT(3:0)
RFPWR(5:0)
RFCTRL(8:0)
RFCONV(11:0)
SLOWAD(6:0)
TXCCONV(2:0)
RFCLK(1:0)
RFClkExt
RFClkExt_GPS


CMT_IF
schematic
AUDIO(8:0)
H_BRIDGE(3:0)
SIM(6:0)
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
SLOWAD(6:0)
ETM(16:0)
JTAG(6:0)
GPSCLK
LPRFCLK_I
LPRF_CMT(7:0)
PWRONX
HS_USB(12:0)
PUSL(7:0)
PCM(3:0)
I2C(1:0)
SPI_CMT(5:0)
IRDA_CMT(2:0)
TSI_CMT(2:0)
WLAN_CMT(7:0)
GPS_CMT(3:0)
RFID_CMT(1:0)
FCI_CMT(3:0)
CAM_CTRL_CMT(4:0)
CCP_CMT(3:0)
KEYB_CMT(20:0)
DMIC(4:0)
VISSI_CMT(27:0)
MESSI_CMT(25:0)
LOSSI_CMT(5:0)
GEN_CTRL_CMT(20:0)
AUDIOCTRL(5:0)
BETTYIO(3:0)
MMC(14:0)
CBUS(3:0)
COMP_VIDEO
ANT_FM
CMT_ENGINE
schematic
AUDIO(8:0)
H_BRIDGE(3:0)
SIM(6:0)
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
SLOWAD(6:0)
ETM(16:0)
JTAG(6:0)
GPSCLK
LPRFCLK_I
LPRF_CMT(7:0)
PWRONX
HS_USB(12:0)
PUSL(7:0)
PCM(3:0)
I2C(1:0)
SPI_CMT(5:0)
IRDA_CMT(2:0)
TSI_CMT(2:0)
WLAN_CMT(7:0)
GPS_CMT(3:0)
RFID_CMT(1:0)
FCI_CMT(3:0)
CAM_CTRL_CMT(4:0)
CCP_CMT(3:0)
KEYB_CMT(20:0)
DMIC(4:0)
VISSI_CMT(27:0)
MESSI_CMT(25:0)
LOSSI_CMT(5:0)
GEN_CTRL_CMT(20:0)
AUDIOCTRL(5:0)
BETTYIO(3:0)
MMC(14:0)
INTUSB(8:0)
CBUS(3:0)
RFClkExt
RFCLK(1:0)
RFCTRL(8:0)
RFCONV(11:0)
TXCCONV(2:0)
RFPWR(5:0)
RFClkExt_GPS
GPIO_APE(125:0)
SLOWAD(6:0)
RFClkExt
RFCLK(1:0)
RFCTRL(8:0)
RFCONV(11:0)
TXCCONV(2:0)
RFPWR(5:0)
RFClkExt_GPS
GPIO_APE(125:0)
H_BRIDGE(3:0)
USB_ACI(7:0)
XAUDIO(7:0)
AUDIOCTRL(5:0)
CHARGER
SIM(6:0)
AUDIO(8:0)
CBUS(3:0)
INTUSB(8:0)
MESSI_CMT(25:0)
GEN_CTRL_CMT(20:0)
PCM(3:0)
PUSL(7:0)
PWRONX
LPRFCLK_I
COMP_VIDEO
ANT_FM
BETTYIO(3:0)
FCI_CMT(3:0)
I2C(1:0)



USB

empty

USB_ACI(7:0) — USB_ACI(7:0)

HS_USB(12:0) — HS_USB(12:0)

PUSL(7:0) — PUSL(7:0)

3300-3999 ????

MMC

sdcard

MMC(14:0) — MMC(14:0)

3200-3299

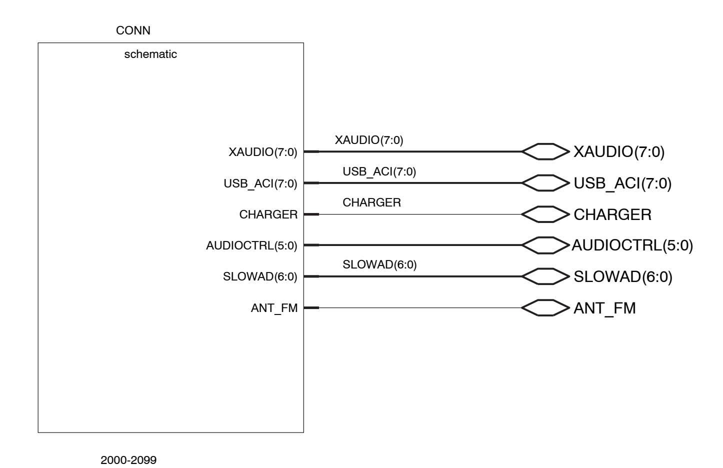
GPS_CMT(3:0)
PUSL(7:0)
FCI_CMT(3:0)
GPSCLK

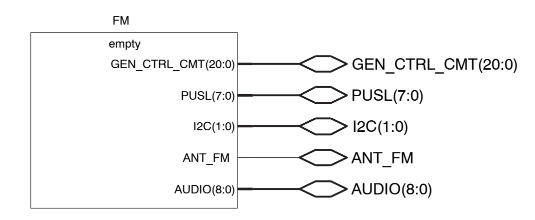
IRDA_CMT(2:0)

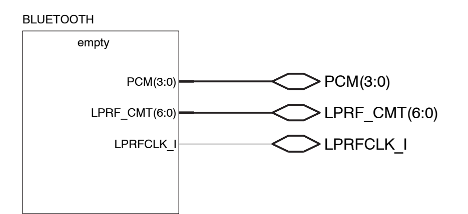
I2C(1:0)
RFID_CMT(1:0)

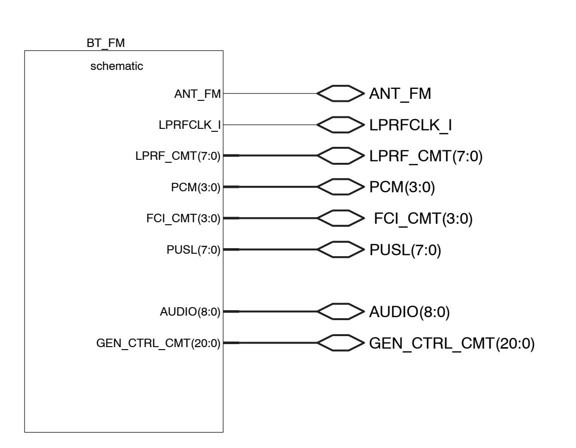
PUSL(7:0)
WLAN_CMT(7:0)
LPRFCLK_I

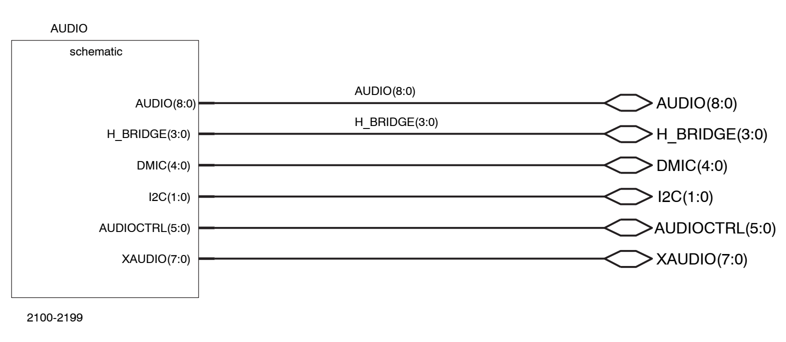
CBUS(3:0)









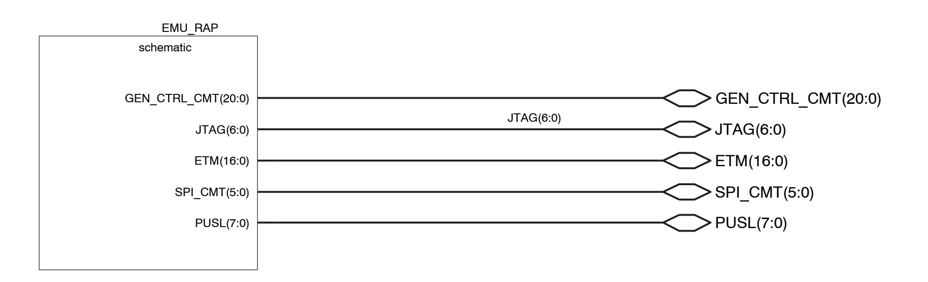


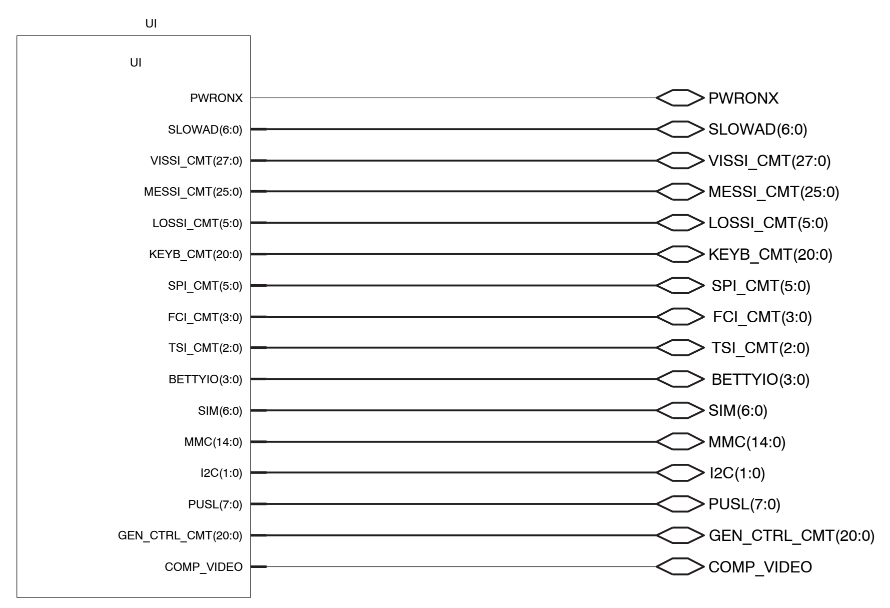
SIM

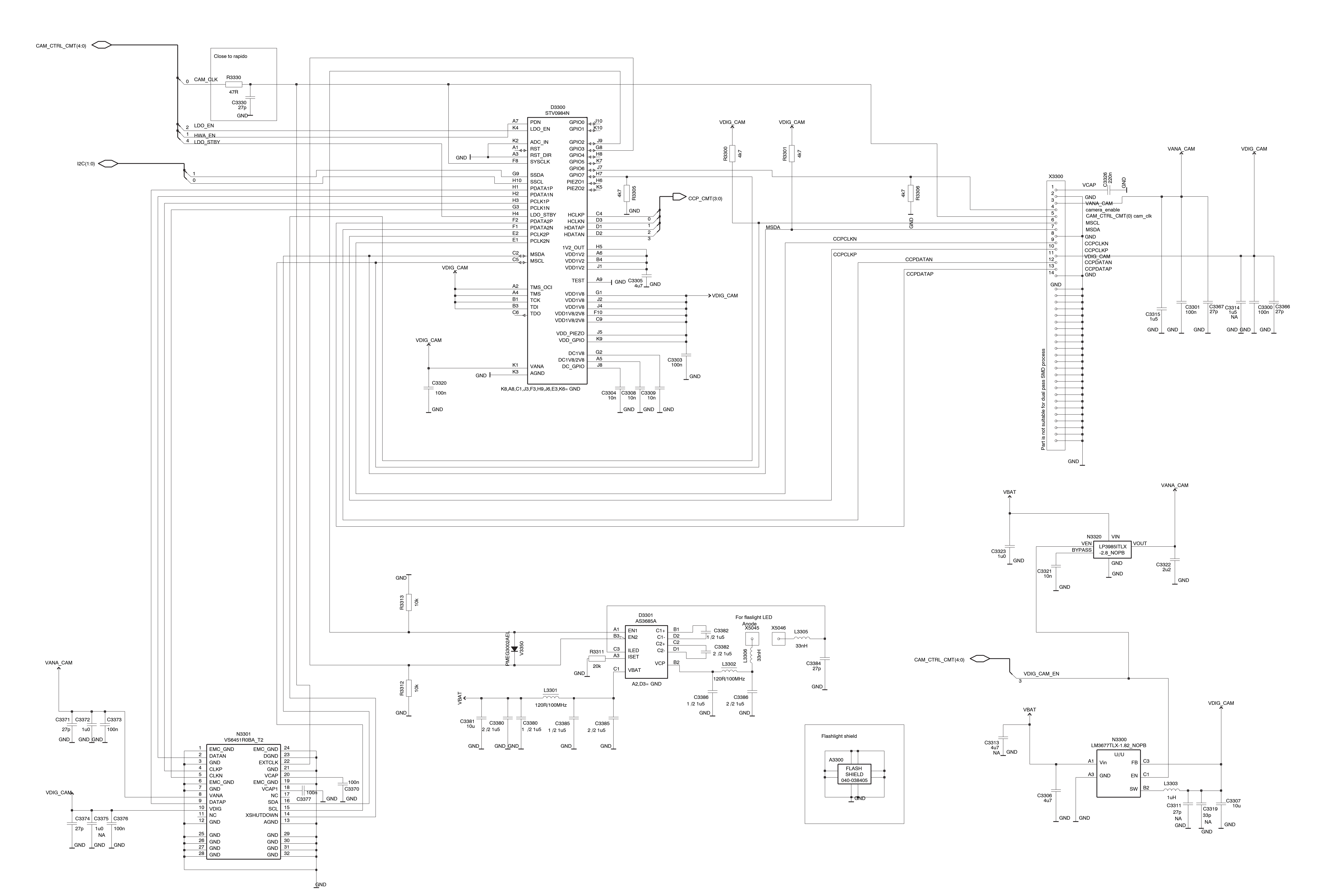
schematic

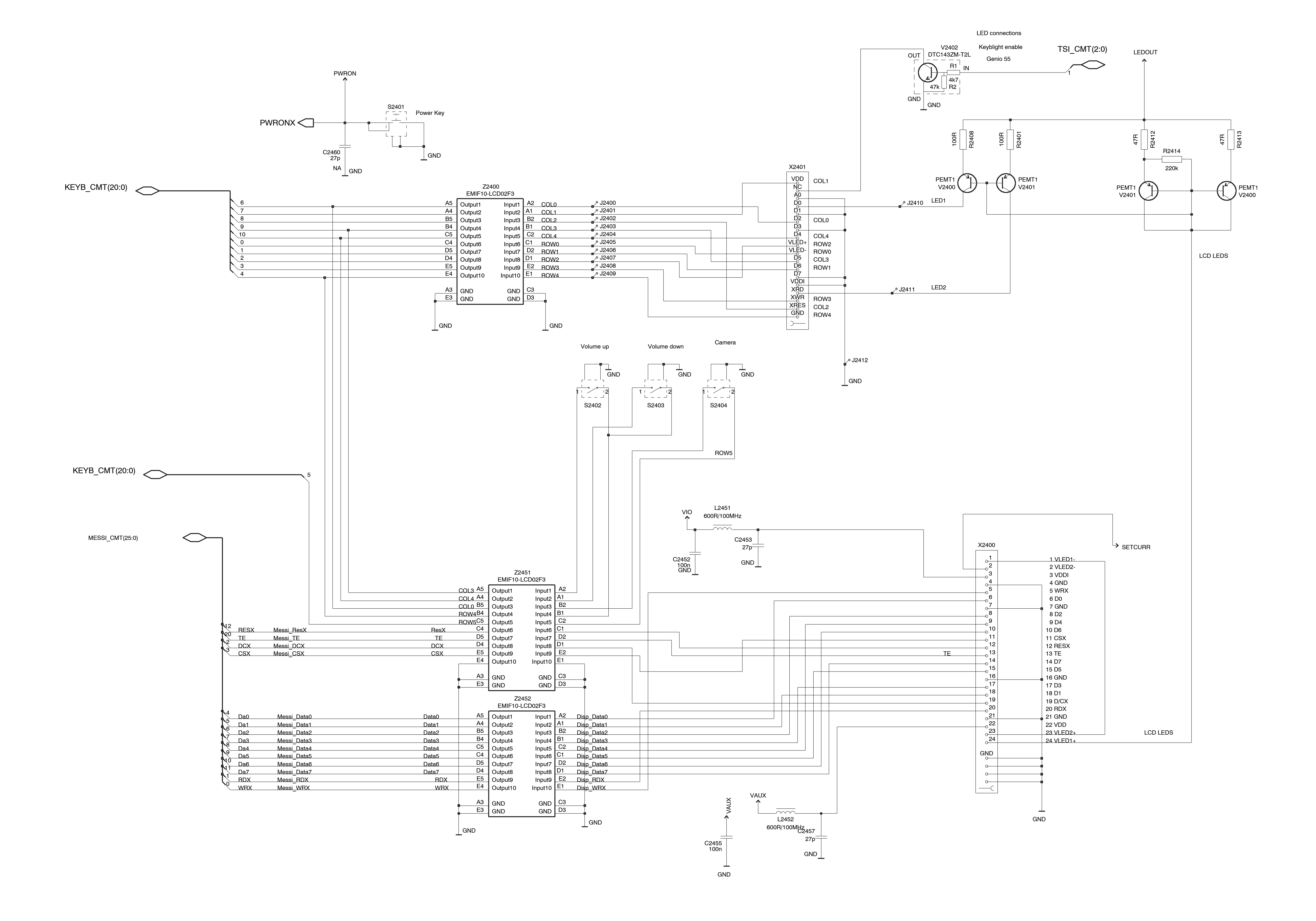
SIMIF(6:0) — SIM(6:0) — SIM(6:0)

2700-2799

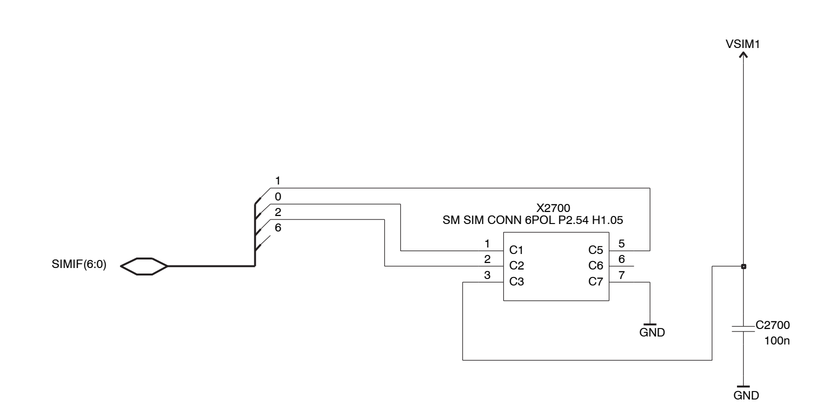




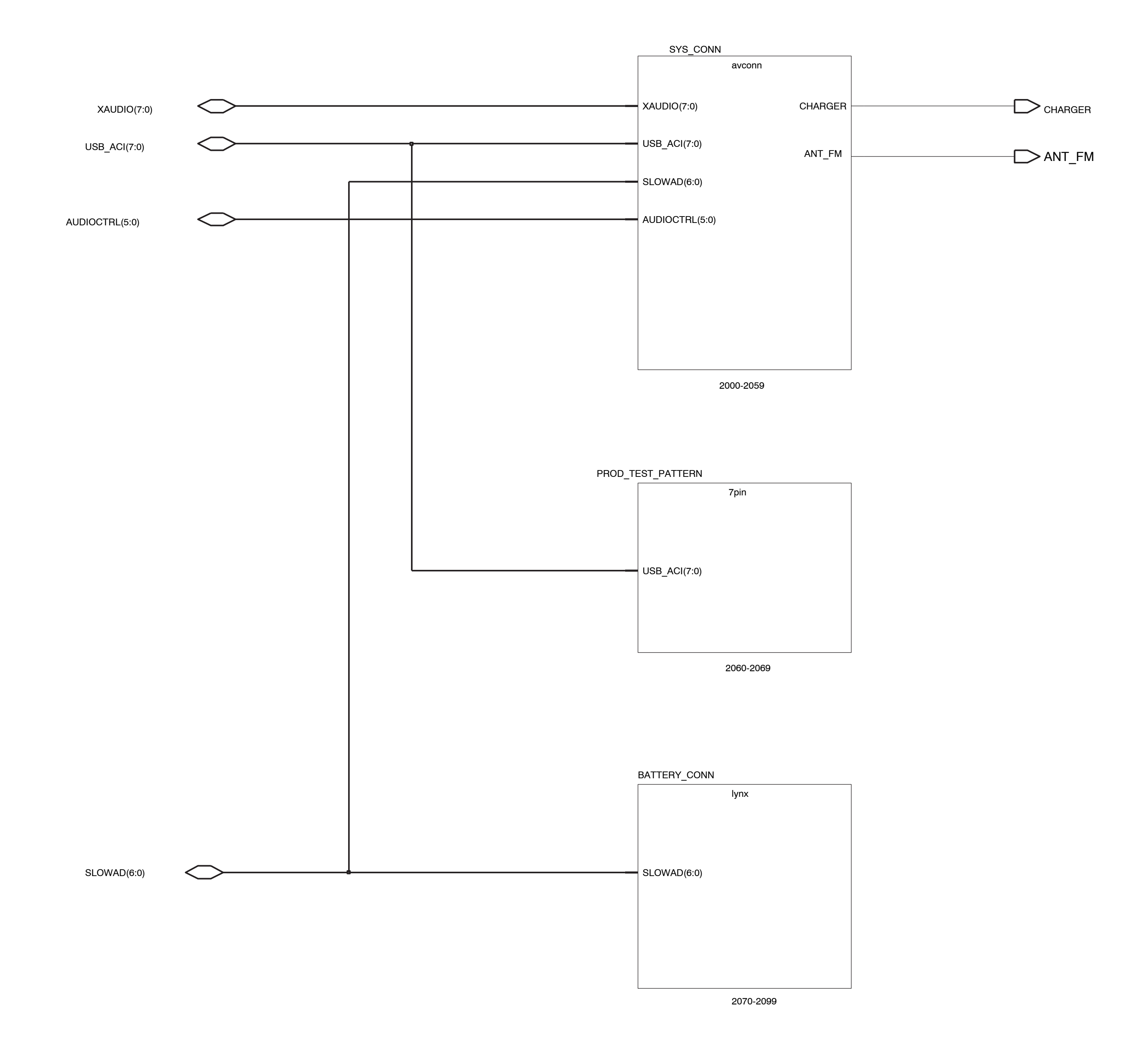


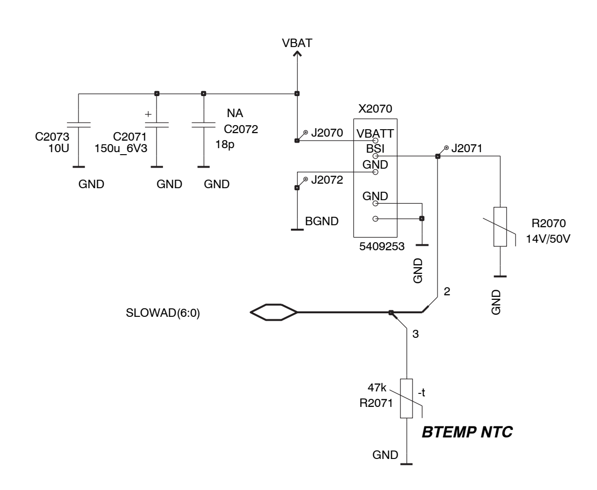


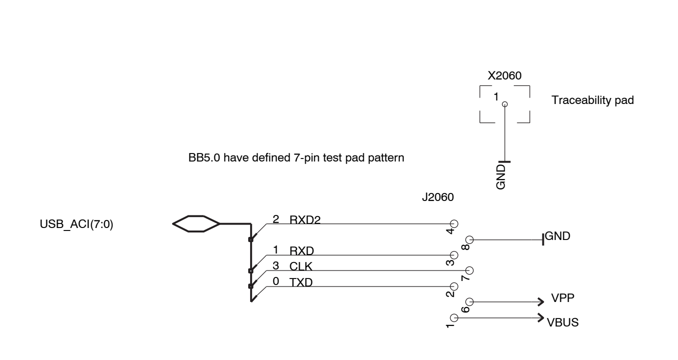
PWRON
PWRONX
S2401
Power Key
C2460
27p
NA
GND
KEYB_CMT(20:0)
Z2400
EMIF10-LCD02F3
X2401
LED connections
V2402
DTC143ZM-T2L
Keyblight enable
Genio 55
TSI_CMT(2:0)
LEDOUT
R2408
R2401
R2412
R2413
R2414
220k
PEMT1
V2400
V2401
J2410
LED1
J2411
LED2
J2412
LCD LEDS
Volume up
Volume down
Camera
S2402
S2403
S2404
ROW5
VIO
L2451
600R/100MHz
C2453
27p
C2452
100n
SETCURR
X2400
MESSI_CMT(25:0)
Z2451
EMIF10-LCD02F3
Z2452
EMIF10-LCD02F3
VAUX
C2455
100n
L2452
600R/100MHz
C2457
27p

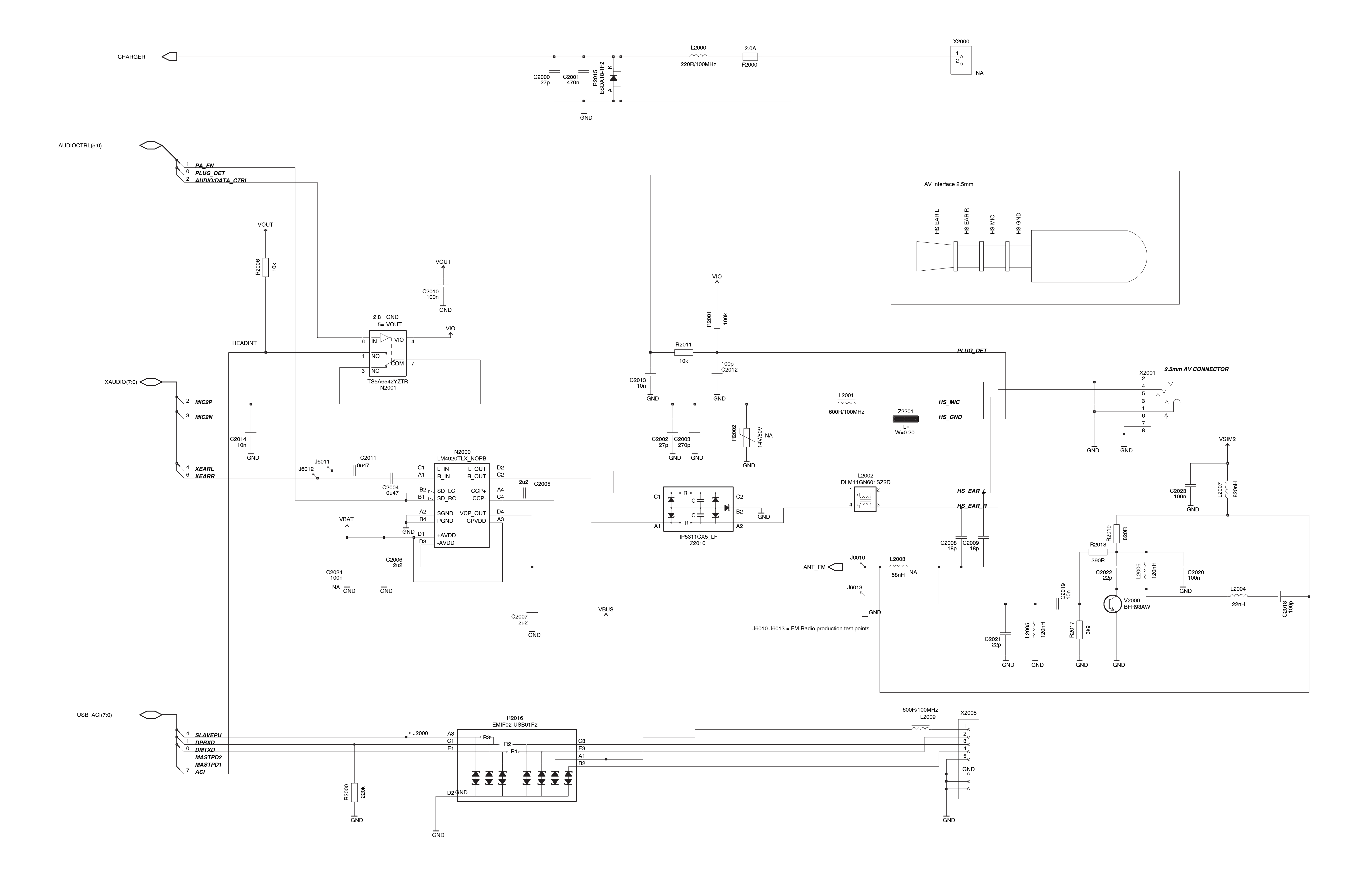


VSIM1
1
0
2
6
X2700
SM SIM CONN 6POL P2.54 H1.05
SIMIF(6:0)
1
2
3
C1
C2
C3
C5
C6
C7
5
6
7
GND
C2700
100n
GND

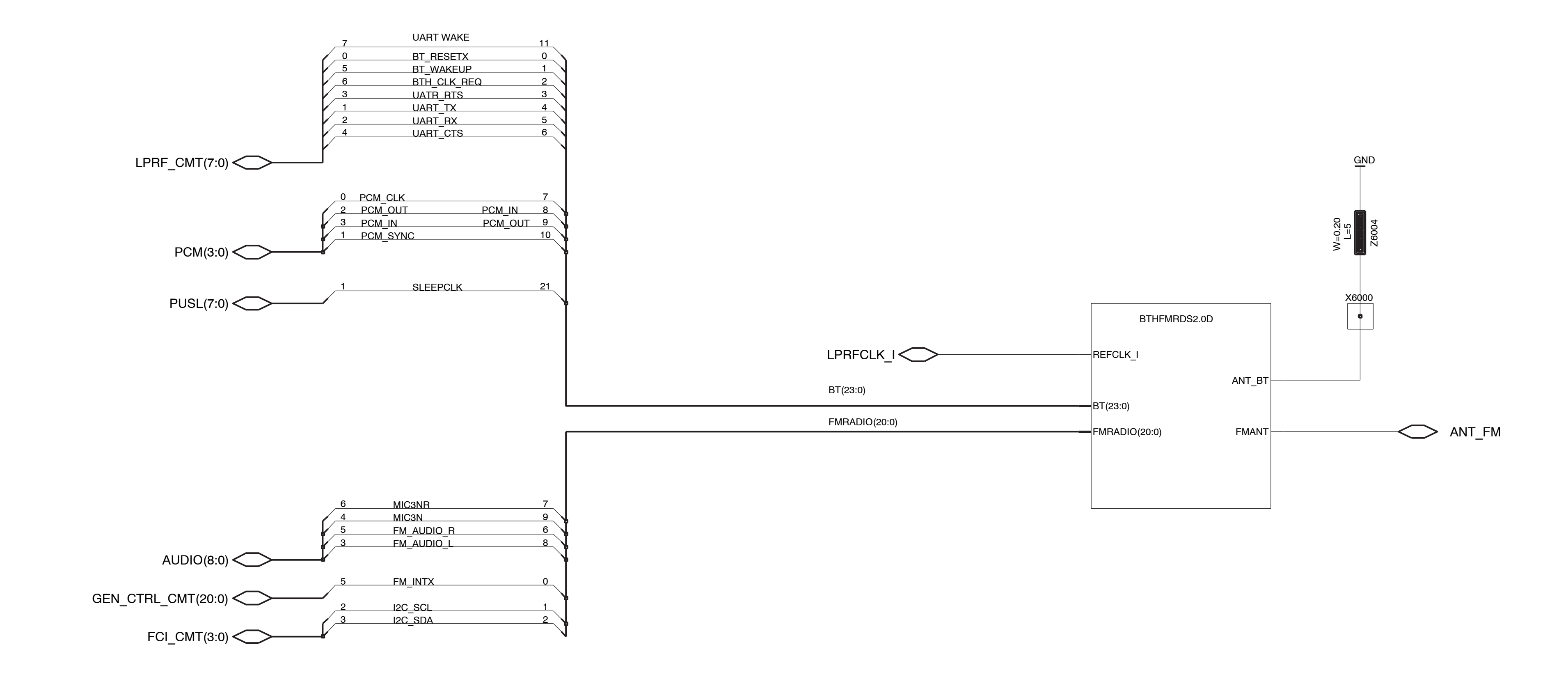

SYS_CONN
avconn
XAUDIO(7:0)
XAUDIO(7:0)
USB_ACI(7:0)
USB_ACI(7:0)
SLOWAD(6:0)
AUDIOCTRL(5:0)
AUDIOCTRL(5:0)
CHARGER
CHARGER
ANT_FM
ANT_FM
2000-2059
PROD_TEST_PATTERN
7pin
USB_ACI(7:0)
2060-2069
BATTERY_CONN
lynx
SLOWAD(6:0)
SLOWAD(6:0)
2070-2099


VBAT
X2070
C2073
10U
C2071
150u_6V3
NA
C2072
18p
J2070
VBATT
BSI
GND
GND
J2071
J2072
BGND
5409253
R2070
14V/50V
GND
GND
GND
GND
GND
SLOWAD(6:0)
2
3
47k
R2071
-t
BTEMP NTC
GND

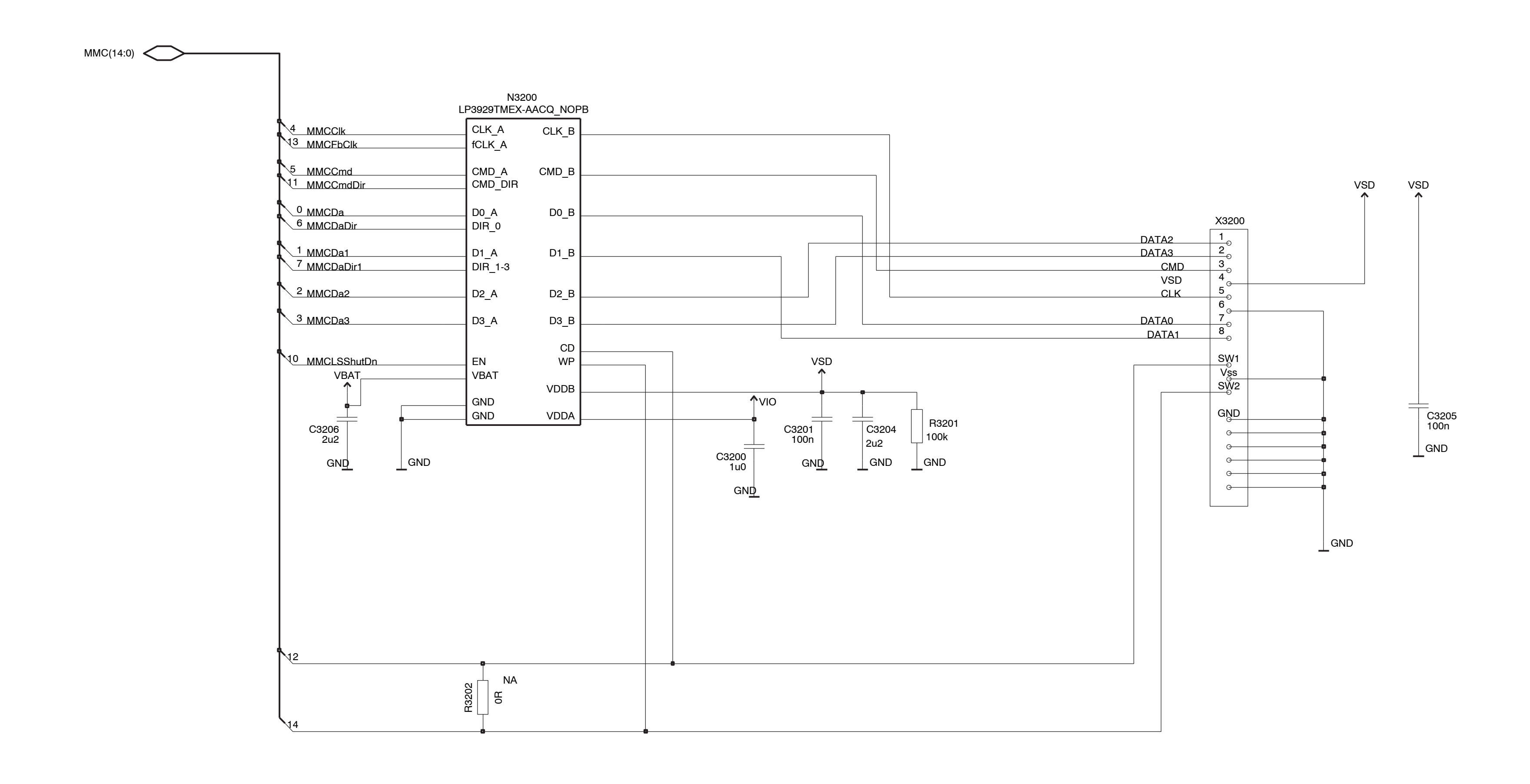

X2060
1
Traceability pad
GND
BB5.0 have defined 7-pin test pad pattern
J2060
USB_ACI(7:0)
2 RXD2
4
8
GND
1 RXD
3 CLK
0 TXD
3
7
2
6
VPP
1
VBUS

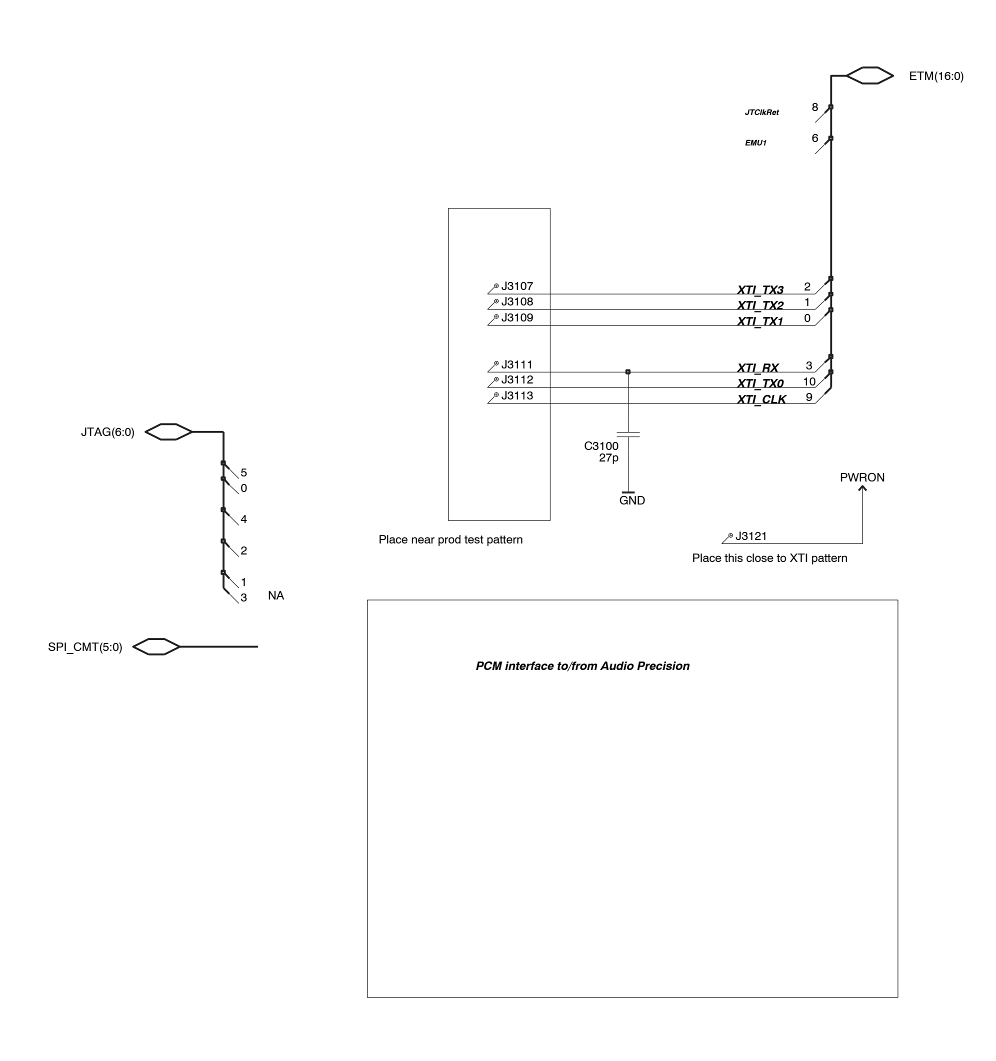


CHARGER
L2000
220R/100MHz
2.0A
F2000
X2000
NA
C2000
27p
C2001
470n
R2015
ESDA18-1F2
GND
AUDIOCTRL(5:0)
PA_EN
PLUG_DET
AUDIO/DATA_CTRL
AV Interface 2.5mm
HS EAR L
HS EAR R
HS MIC
HS GND
VOUT
R2006
10k
C2010
100n
2,8= GND
5= VOUT
VIO
HEADINT
TS5A6542YZTR
N2001
R2001
100k
R2011
10k
100p
C2012
C2013
10n
XAUDIO(7:0)
MIC2P
MIC2N
C2014
10n
GND
L2001
600R/100MHz
Z2201
L=
W=0.20
HS_MIC
HS_GND
X2001
2.5mm AV CONNECTOR
C2002
27p
C2003
270p
R2002
14V/50V
NA
N2000
LM4920TLX_NOPB
J6011
J6012
C2011
0u47
C2004
0u47
XEARL
XEARR
2u2
C2005
L2002
DLM11GN601SZ2D
HS_EAR_L
HS_EAR_R
IP5311CX5_LF
Z2010
VBAT
C2006
2u2
C2024
100n
NA
C2007
2u2
VSIM2
C2023
100n
L2007
820nH
R2019
820R
R2018
390R
C2022
22p
L2006
120nH
C2020
100n
C2008
18p
C2009
18p
ANT_FM
J6010
L2003
68nH
NA
J6013
C2019
10n
V2000
BFR93AW
L2004
22nH
C2018
100p
C2021
22p
L2005
120nH
R2017
3k9
J6010-J6013 = FM Radio production test points
VBUS
USB_ACI(7:0)
SLAVEPU
DPRXD
DMTXD
MASTPD2
MASTPD1
ACI
J2000
R2016
EMIF02-USB01F2
R2000
220k
600R/100MHz
L2009
X2005

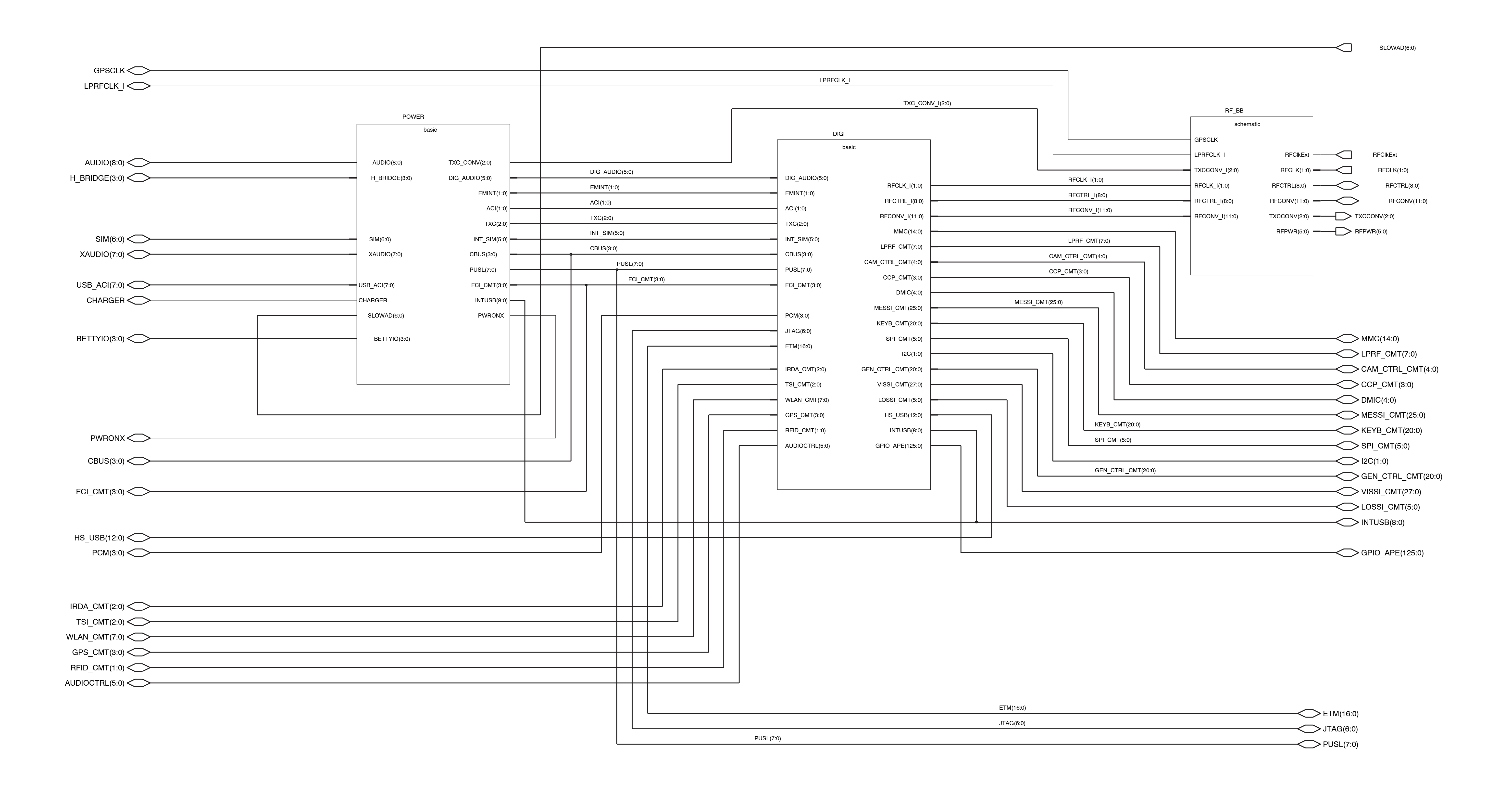


LPRF_CMT(7:0)
7 UART WAKE 11
0 BT_RESETX 0
5 BT_WAKEUP 1
6 BTH_CLK_REQ 2
3 UATR_RTS 3
1 UART_TX 4
2 UART_RX 5
4 UART_CTS 6
PCM(3:0)
0 PCM_CLK 7
2 PCM_OUT PCM_IN 8
3 PCM_IN PCM_OUT 9
1 PCM_SYNC 10
PUSL(7:0)
1 SLEEPCLK 21
LPRFCLK_I
BT(23:0)
FMRADIO(20:0)
BTHFMRDS2.0D
REFCLK_I
BT(23:0)
FMRADIO(20:0)
ANT_BT
FMANT
ANT_FM
GND
W=0.20
L=5
Z6004
X6000
AUDIO(8:0)
6 MIC3NR 7
4 MIC3N 9
5 FM_AUDIO_R 6
3 FM_AUDIO_L 8
GEN_CTRL_CMT(20:0)
5 FM_INTX 0
FCI_CMT(3:0)
2 I2C_SCL 1
3 I2C_SDA 2

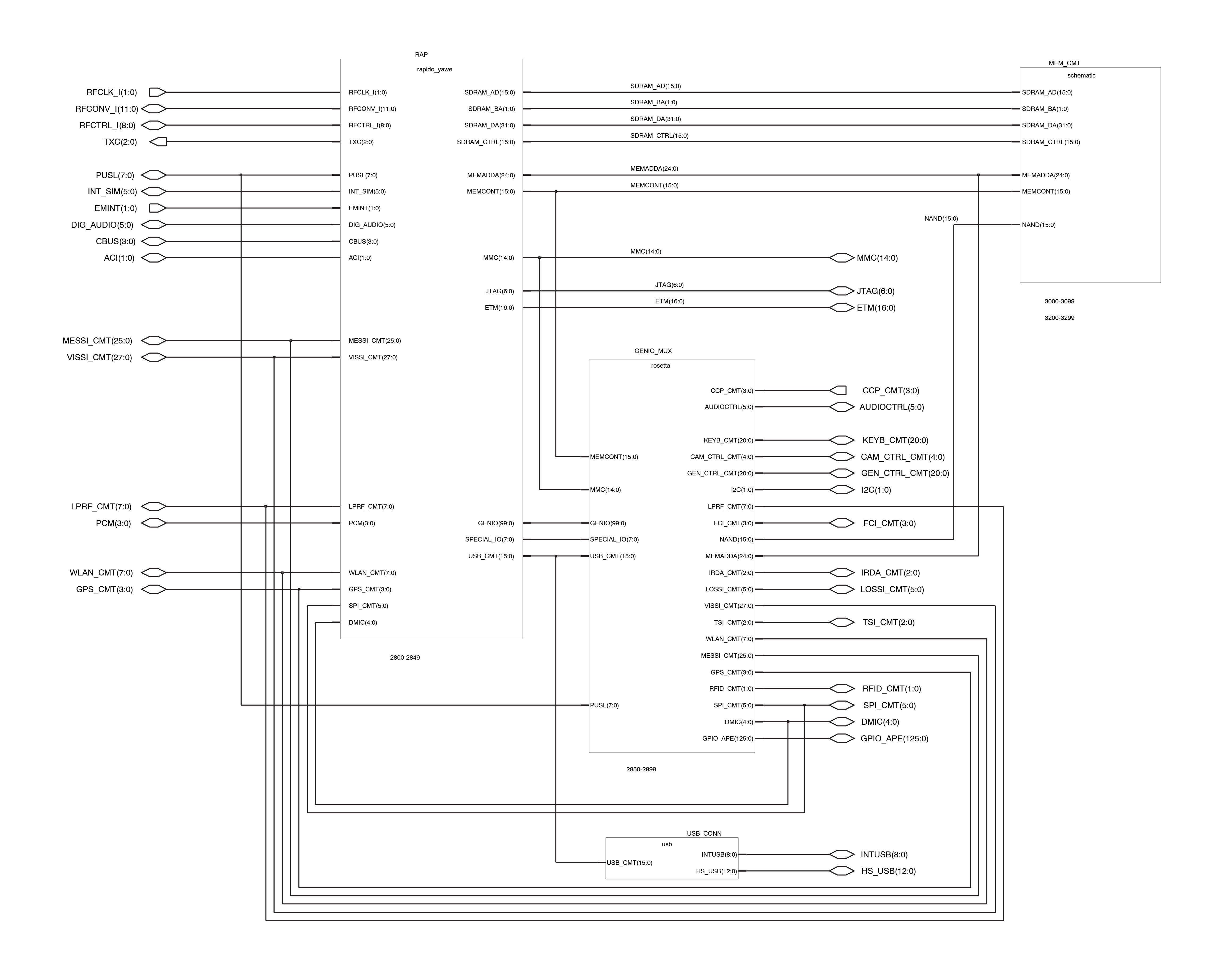

MMC(14:0)
N3200
LP3929TMEX-AACQ_NOPB
4 MMCClk
13 MMCFbClk
5 MMCCmd
11 MMCCmdDir
0 MMCDa
6 MMCDaDir
1 MMCDa1
7 MMCDaDir1
2 MMCDa2
3 MMCDa3
10 MMCLSShutDn
CLK_A
fCLK_A
CMD_A
CMD_DIR
D0_A
DIR_0
D1_A
DIR_1-3
D2_A
D3_A
EN
VBAT
GND
GND
CLK_B
CMD_B
D0_B
D1_B
D2_B
D3_B
CD
WP
VDDB
VDDA
VBAT
C3206
2u2
GND
GND
VIO
C3200
1u0
GND
VSD
C3201
100n
GND
C3204
2u2
GND
R3201
100k
GND
X3200
DATA2
DATA3
CMD
VSD
CLK
DATA0
DATA1
SW1
Vss
SW2
GND
VSD
VSD
C3205
100n
GND
GND
12
14
R3202
0R
NA

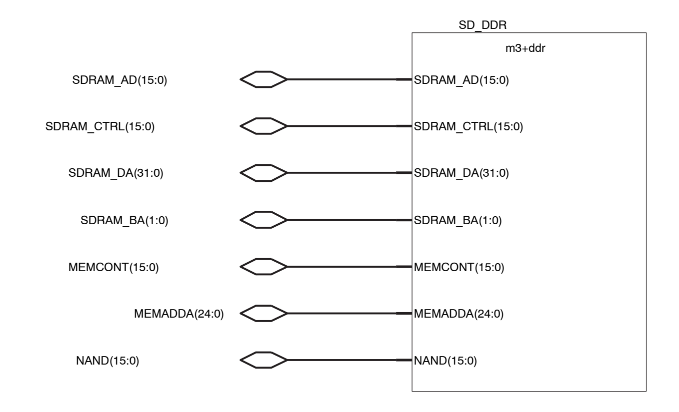


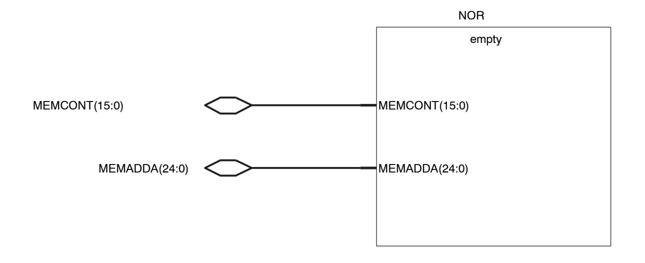
ETM(16:0)
JTClkRet
8
EMU1
6
J3107
J3108
J3109
J3111
J3112
J3113
XTI_TX3
XTI_TX2
XTI_TX1
XTI_RX
XTI_TX0
XTI_CLK
2
1
0
3
10
9
C3100
27p
GND
PWRON
J3121
Place near prod test pattern
Place this close to XTI pattern
JTAG(6:0)
5
0
4
2
1
3
NA
SPI_CMT(5:0)
PCM interface to/from Audio Precision

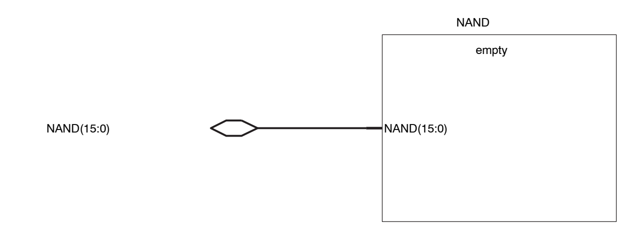


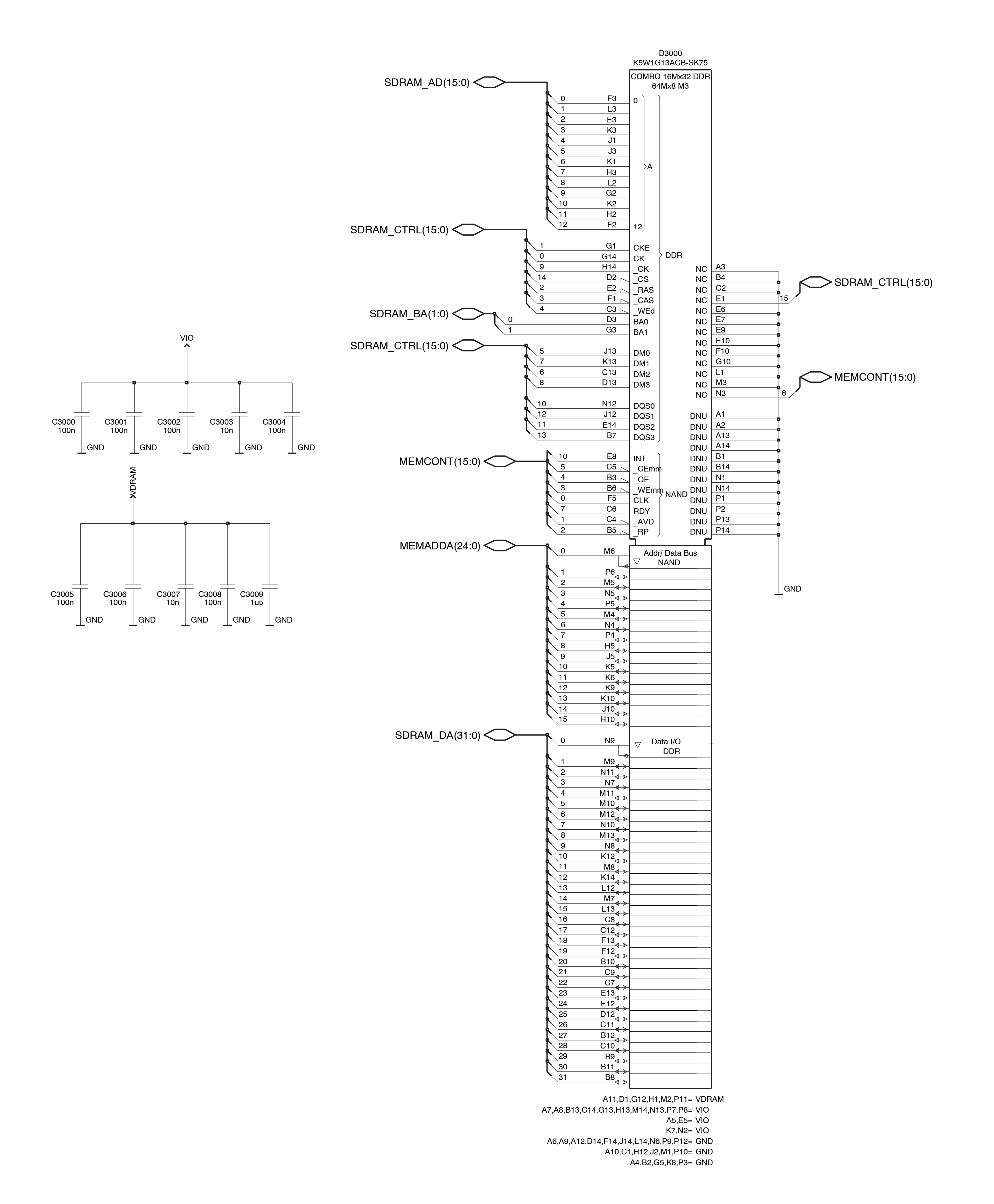
SLOWAD(6:0)
GPSCLK
LPRFCLK_I
LPRFCLK_I
TXC_CONV_I(2:0)
POWER
basic
AUDIO(8:0)
H_BRIDGE(3:0)
SIM(6:0)
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
SLOWAD(6:0)
BETTYIO(3:0)
TXC_CONV(2:0)
DIG_AUDIO(5:0)
EMINT(1:0)
ACI(1:0)
TXC(2:0)
INT_SIM(5:0)
CBUS(3:0)
PUSL(7:0)
FCI_CMT(3:0)
INTUSB(8:0)
PWRONX
AUDIO(8:0)
H_BRIDGE(3:0)
SIM(6:0)
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
BETTYIO(3:0)
PWRONX
CBUS(3:0)
FCI_CMT(3:0)
HS_USB(12:0)
PCM(3:0)
IRDA_CMT(2:0)
TSI_CMT(2:0)
WLAN_CMT(7:0)
GPS_CMT(3:0)
RFID_CMT(1:0)
AUDIOCTRL(5:0)
DIG_AUDIO(5:0)
EMINT(1:0)
ACI(1:0)
TXC(2:0)
INT_SIM(5:0)
CBUS(3:0)
PUSL(7:0)
FCI_CMT(3:0)
DIGI
basic
DIG_AUDIO(5:0)
EMINT(1:0)
ACI(1:0)
TXC(2:0)
INT_SIM(5:0)
CBUS(3:0)
PUSL(7:0)
FCI_CMT(3:0)
PCM(3:0)
JTAG(6:0)
ETM(16:0)
IRDA_CMT(2:0)
TSI_CMT(2:0)
WLAN_CMT(7:0)
GPS_CMT(3:0)
RFID_CMT(1:0)
AUDIOCTRL(5:0)
RFCLK_I(1:0)
RFCTRL_I(8:0)
RFCONV_I(11:0)
MMC(14:0)
LPRF_CMT(7:0)
CAM_CTRL_CMT(4:0)
CCP_CMT(3:0)
DMIC(4:0)
MESSI_CMT(25:0)
KEYB_CMT(20:0)
SPI_CMT(5:0)
I2C(1:0)
GEN_CTRL_CMT(20:0)
VISSI_CMT(27:0)
LOSSI_CMT(5:0)
HS_USB(12:0)
INTUSB(8:0)
GPIO_APE(125:0)
RFCLK_I(1:0)
RFCTRL_I(8:0)
RFCONV_I(11:0)
LPRF_CMT(7:0)
CAM_CTRL_CMT(4:0)
CCP_CMT(3:0)
MESSI_CMT(25:0)
KEYB_CMT(20:0)
SPI_CMT(5:0)
GEN_CTRL_CMT(20:0)
RF_BB
schematic
GPSCLK
LPRFCLK_I
TXCCONV_I(2:0)
RFCLK_I(1:0)
RFCTRL_I(8:0)
RFCONV_I(11:0)
RFClkExt
RFCLK(1:0)
RFCTRL(8:0)
RFCONV(11:0)
TXCCONV(2:0)
RFPWR(5:0)
RFClkExt
RFCLK(1:0)
RFCTRL(8:0)
RFCONV(11:0)
TXCCONV(2:0)
RFPWR(5:0)
MMC(14:0)
LPRF_CMT(7:0)
CAM_CTRL_CMT(4:0)
CCP_CMT(3:0)
DMIC(4:0)
MESSI_CMT(25:0)
KEYB_CMT(20:0)
SPI_CMT(5:0)
I2C(1:0)
GEN_CTRL_CMT(20:0)
VISSI_CMT(27:0)
LOSSI_CMT(5:0)
INTUSB(8:0)
GPIO_APE(125:0)
ETM(16:0)
JTAG(6:0)
PUSL(7:0)
ETM(16:0)
JTAG(6:0)
PUSL(7:0)


RAP
rapido_yawe
RFCLK_I(1:0)
RFCONV_I(11:0)
RFCTRL_I(8:0)
TXC(2:0)
PUSL(7:0)
INT_SIM(5:0)
EMINT(1:0)
DIG_AUDIO(5:0)
CBUS(3:0)
ACI(1:0)
MESSI_CMT(25:0)
VISSI_CMT(27:0)
LPRF_CMT(7:0)
PCM(3:0)
WLAN_CMT(7:0)
GPS_CMT(3:0)
SPI_CMT(5:0)
DMIC(4:0)
SDRAM_AD(15:0)
SDRAM_BA(1:0)
SDRAM_DA(31:0)
SDRAM_CTRL(15:0)
MEMADDA(24:0)
MEMCONT(15:0)
MMC(14:0)
JTAG(6:0)
ETM(16:0)
GENIO(99:0)
SPECIAL_IO(7:0)
USB_CMT(15:0)
2800-2849
MEM_CMT
schematic
NAND(15:0)
3000-3099
3200-3299
GENIO_MUX
rosetta
CCP_CMT(3:0)
AUDIOCTRL(5:0)
KEYB_CMT(20:0)
CAM_CTRL_CMT(4:0)
GEN_CTRL_CMT(20:0)
I2C(1:0)
FCI_CMT(3:0)
IRDA_CMT(2:0)
LOSSI_CMT(5:0)
TSI_CMT(2:0)
RFID_CMT(1:0)
GPIO_APE(125:0)
2850-2899
USB_CONN
usb
INTUSB(8:0)
HS_USB(12:0)

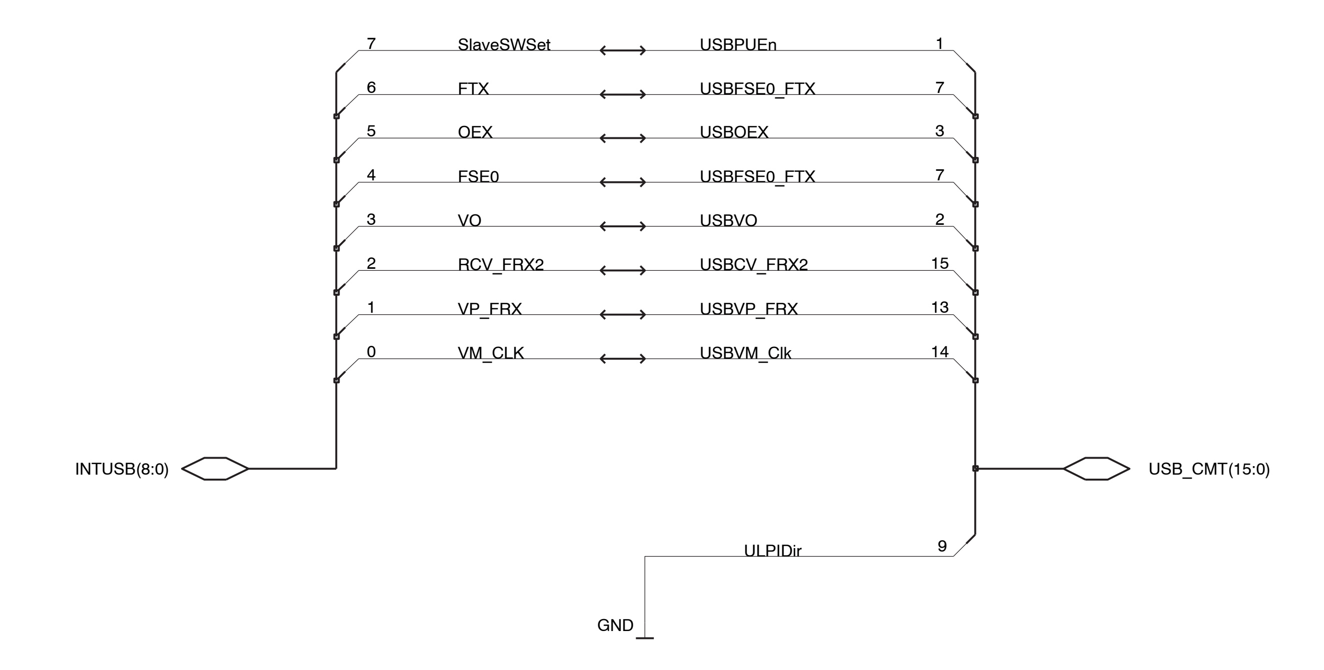

SD_DDR
m3+ddr
SDRAM_AD(15:0)
SDRAM_AD(15:0)
SDRAM_CTRL(15:0)
SDRAM_CTRL(15:0)
SDRAM_DA(31:0)
SDRAM_DA(31:0)
SDRAM_BA(1:0)
SDRAM_BA(1:0)
MEMCONT(15:0)
MEMCONT(15:0)
MEMADDA(24:0)
MEMADDA(24:0)
NAND(15:0)
NAND(15:0)

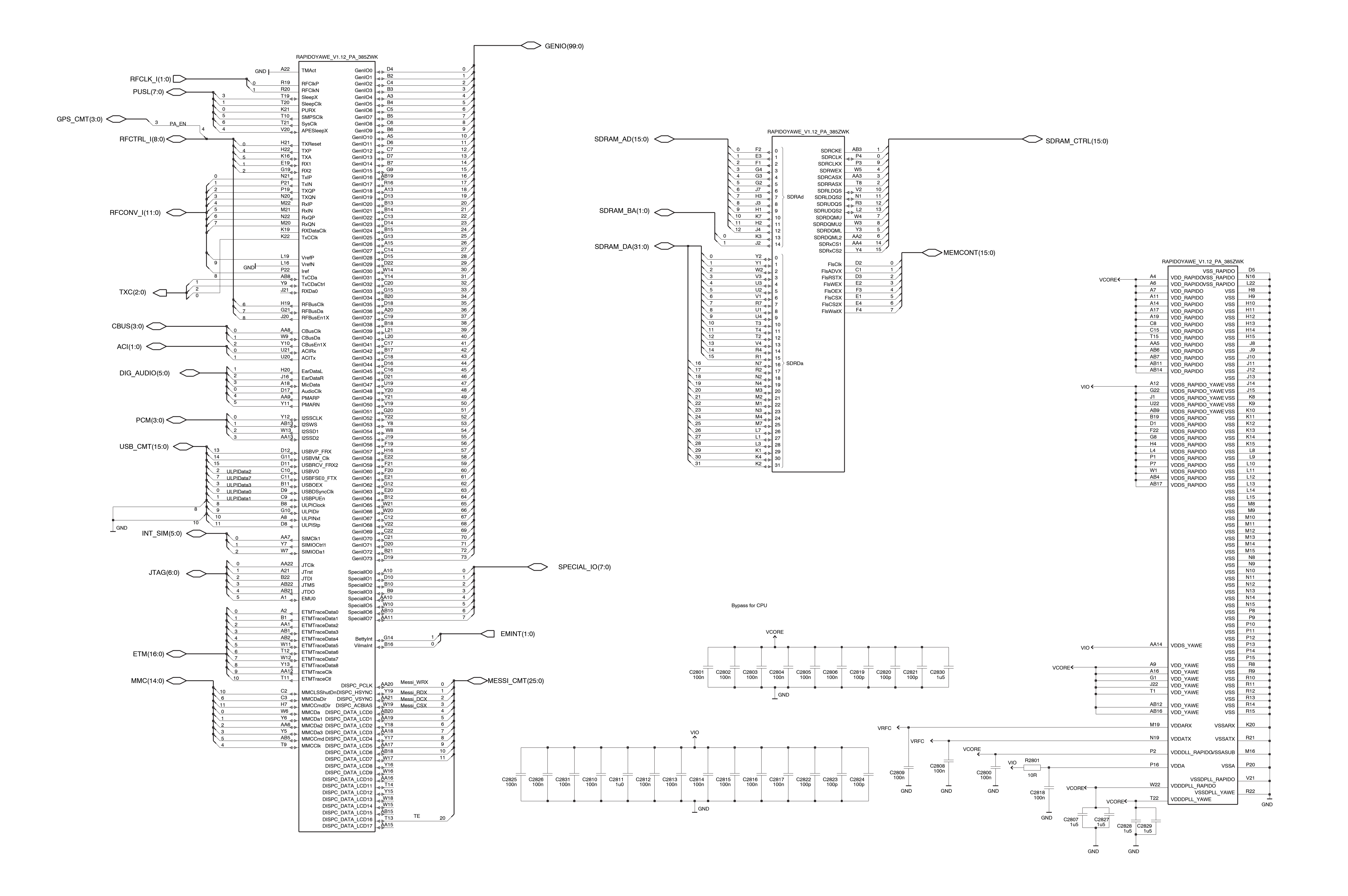

NOR
empty
MEMCONT(15:0)
MEMCONT(15:0)
MEMADDA(24:0)
MEMADDA(24:0)


NAND
empty
NAND(15:0)
NAND(15:0)



VIO
C3000 100n
C3001 100n
C3002 100n
C3003 10n
C3004 100n
GND
VDRAM
C3005 100n
C3006 100n
C3007 10n
C3008 100n
C3009 1u5
D3000
K5W1G13ACB-SK75
COMBO 16Mx32 DDR
64Mx8 M3
SDRAM_AD(15:0)
SDRAM_CTRL(15:0)
SDRAM_BA(1:0)
MEMCONT(15:0)
MEMADDA(24:0)
SDRAM_DA(31:0)
CKE
CK
_CK
_CS
_RAS
_CAS
_WEd
BA0
BA1
DM0
DM1
DM2
DM3
DQS0
DQS1
DQS2
DQS3
DDR
INT
_CEmm
_OE
_WEmm
CLK
RDY
_AVD
_RP
NAND
NC
DNU
Addr/ Data Bus
NAND
Data I/O
DDR
A11,D1,G12,H1,M2,P11= VDRAM
A7,A8,B13,C14,G13,H13,M14,N13,P7,P8= VIO
A5,E5= VIO
K7,N2= VIO
A6,A9,A12,D14,F14,J14,L14,N6,P9,P12= GND
A10,C1,H12,J2,M1,P10= GND
A4,B2,G5,K8,P3= GND


7
SlaveSWSet
USBPUEn
1
6
FTX
USBFSE0_FTX
7
5
OEX
USBOEX
3
4
FSE0
USBFSE0_FTX
7
3
VO
USBVO
2
2
RCV_FRX2
USBCV_FRX2
15
1
VP_FRX
USBVP_FRX
13
0
VM_CLK
USBVM_Clk
14
INTUSB(8:0)
USB_CMT(15:0)
ULPIDir
9
GND



RAPIDOYAWE_V1.12_PA_385ZWK
GENIO(99:0)
RFCLK_I(1:0)
PUSL(7:0)
GPS_CMT(3:0)
PA_EN
RFCTRL_I(8:0)
RFCONV_I(11:0)
TXC(2:0)
CBUS(3:0)
ACI(1:0)
DIG_AUDIO(5:0)
PCM(3:0)
USB_CMT(15:0)
INT_SIM(5:0)
JTAG(6:0)
ETM(16:0)
MMC(14:0)
SPECIAL_IO(7:0)
EMINT(1:0)
MESSI_CMT(25:0)
SDRAM_AD(15:0)
SDRAM_BA(1:0)
SDRAM_DA(31:0)
SDRAM_CTRL(15:0)
MEMCONT(15:0)
SDRAd
SDRDa
VCORE
VIO
VRFC
GND
Bypass for CPU
C2801 100n
C2802 100n
C2803 100n
C2804 100n
C2805 100n
C2806 100n
C2819 100p
C2820 100p
C2821 100p
C2830 1u5
C2825 100n
C2826 100n
C2831 100n
C2810 100n
C2811 1u0
C2812 100n
C2813 100n
C2814 100n
C2815 100n
C2816 100n
C2817 100n
C2822 100p
C2823 100p
C2824 100p
C2809 100n
C2808 100n
C2800 100n
R2801 10R
C2818 100n
C2807 1u5
C2827 1u5
C2828 1u5
C2829 1u5

DMIC(4:0)
NAND(15:0)
MESSI_CMT(25:0)
AUDIOCTRL(5:0)
VISSI_CMT(27:0)
CAM_CTRL_CMT(4:0)
GEN_CTRL_CMT(20:0)
I2C(1:0)
FCI_CMT(3:0)
NAND(15:0)
MEMADDA(24:0)
IRDA_CMT(2:0)
LOSSI_CMT(5:0)
VISSI_CMT(27:0)
TSI_CMT(2:0)
MEMCONT(15:0)
MMC(14:0)
SPI_CMT(5:0)
GENIO(99:0)
SPECIAL_IO(7:0)
USB_CMT(15:0)
SPI_CMT(5:0)
RFID_CMT(1:0)
MESSI_CMT(25:0)
GPIO_APE(125:0)
WLAN_CMT(7:0)
GPS_CMT(3:0)
LPRF_CMT(7:0)
RFID_CMT(1:0)
SPI_CMT(5:0)
NAND(15:0)
WLAN_CMT(4:0)
GPS_CMT(2:0)
VISSI_CMT(27:0)
LOSSI_CMT(5:0)
USB_CMT(15:0)

GENIO(99:0)

0	genio0	MEMADDA0
1	genio1	MEMADDA1
2	genio2	MEMADDA2
3	genio3	MEMADDA3
4	genio4	MEMADDA4
5	genio5	MEMADDA5
6	genio6	MEMADDA6
7	genio7	MEMADDA7
8	genio8	MEMADDA8
9	genio9	MEMADDA9
10	genio10	MEMADDA10
11	genio11	MEMADDA11
12	genio12	MEMADDA12
13	genio13	MEMADDA13
14	genio14	MEMADDA14
15	genio15	MEMADDA15
16	genio16	
17	genio17	Plug_det
18	genio18	Audio_PA_EN
19	genio19	Audio_data_CTRL
20	genio20	FM_Int
21	genio21	BT_Wake_up
22	genio22	FlashINT
23	genio23	
24	genio24	
25	genio25	TE_SUB
26	genio26	CSX_sub
27	genio27	LDO_STBY
28	genio28	
29	genio29	CAM_VCTRL
30	genio30	I2C_SDA
31	genio31	I2C_SCL
32	genio32	KEYB0
33	genio33	KEYB1
34	genio34	KEYB2
35	genio35	KEYB3
36	genio36	KEYB4
37	genio37	KEYB5
38	genio38	KEYB6
39	genio39	KEYB7
40	genio40	KEYB8
41	genio41	KEYB9
42	genio42	KEYB10
43	genio43	
44	genio44	RESX
45	genio45	MMCDet
46	genio46	MMCDaDir1
47	genio47	
48	genio48	I2C_ISA_SDA
49	genio49	LDO_EN
50	genio50	UART_WAKE
51	genio51	I2C_ISA_SCL
52	genio52	
53	genio53	
54	genio54	
55	genio55	keyb_light_en
56	genio56	
57	genio57	
58	genio58	
59	genio59	BTDAIN
60	genio60	BTDAOUT
61	genio61	
62	genio62	
63	genio63	
64	genio64	
65	genio65	BTRSTX
66	genio66	STV_PDN
67	genio67	
68	genio68	CAMCLK
69	genio69	BTCTS
70	genio70	BTRTS
71	genio71	MMCFbClk
72	genio72	
73	genio73	

SPECIAL_IO(7:0)

0	specialio0	CCPDaP
1	specialio1	CCPDaN
2	specialio2	CCPClkP
3	specialio3	CCPClkN

CAM_CTRL_CMT(4:0)

genio29	CAM_VCTRL	3
genio66	STV_PDN	1
genio49	LDO_EN	2
genio68	CAM_CLK	0
genio27	LDOSTBY	4

LPRF_CMT(7:0)

genio65	BTRSTX	0
genio59	BTDAIN	1
genio60	BTDAOUT	2
genio69	BTCTS	3
genio70	BTRTS	4
genio21	BTWAKE	5
genio50	UART_WAKE	7

MMC(14:0)

genio46	MMCDaDir1	7
genio43	MMCDet	12
genio71	MMCFbClk	13
genio45	MMCprewarning	14

MESSI_CMT(25:0)

genio25	TE_SUB	19
genio26	CSX_sub	13
genio44	RESX	12

MEMCONT(15:0)

genio22 — Flash_int — 10

CCP_CMT(3:0)

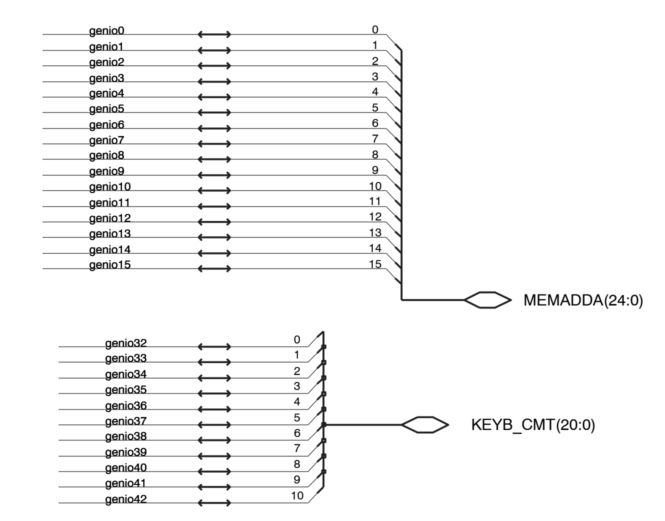
100R R2444 100R R2445

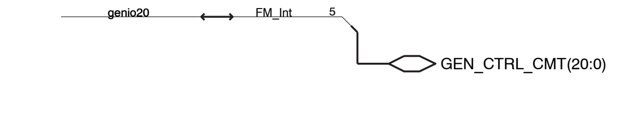
specialio2	CCPClkP	0
specialio3	CCPClkN	1
specialio0	CCPDaP	2
specialio1	CCPDaN	3

AUDIOCTRL(5:0)

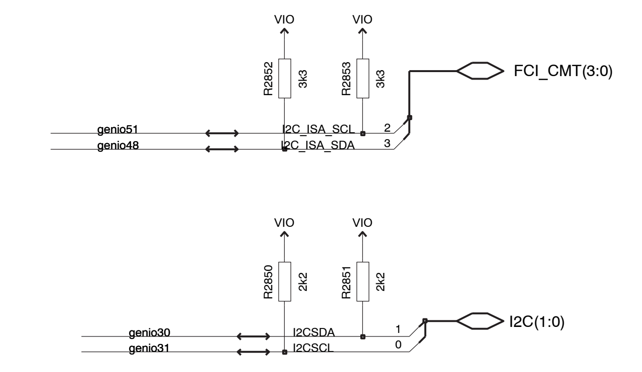
genio17	Plug_det	0
genio18	Audio_PA_En	1
genio19	Audio_data_ctrl	2

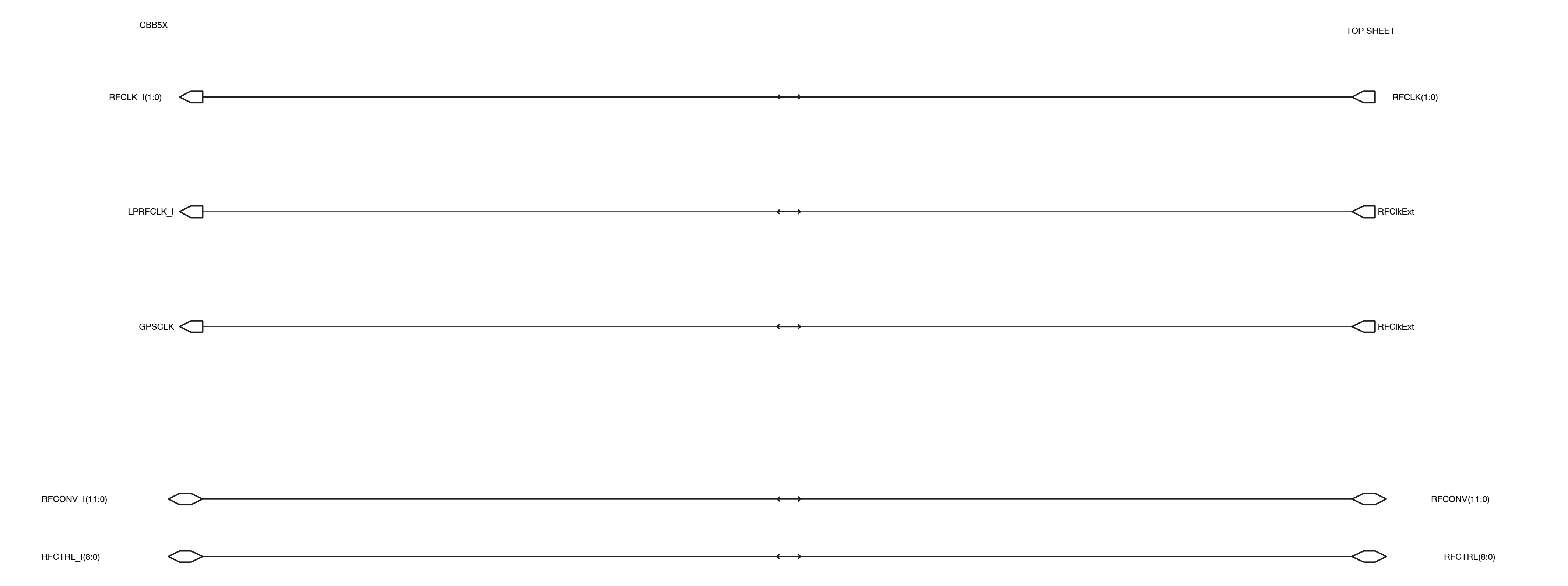
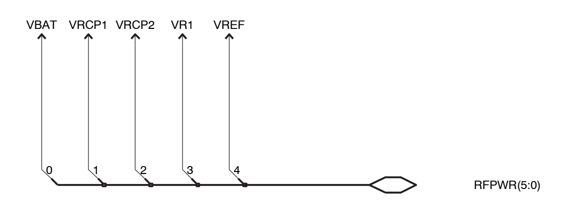
PUSL(7:0)
7 WILMA_SLEEPX
3 SLEEPX
D2851
74LVC1G32YZTR
1 ≥1 4
2
LPRF_CMT(7:0) 6 BTH_CLK_REQ
5= VIO
3= GND
R2857 100k GND
R2856 100k GND
VIO
C2235 100n GND

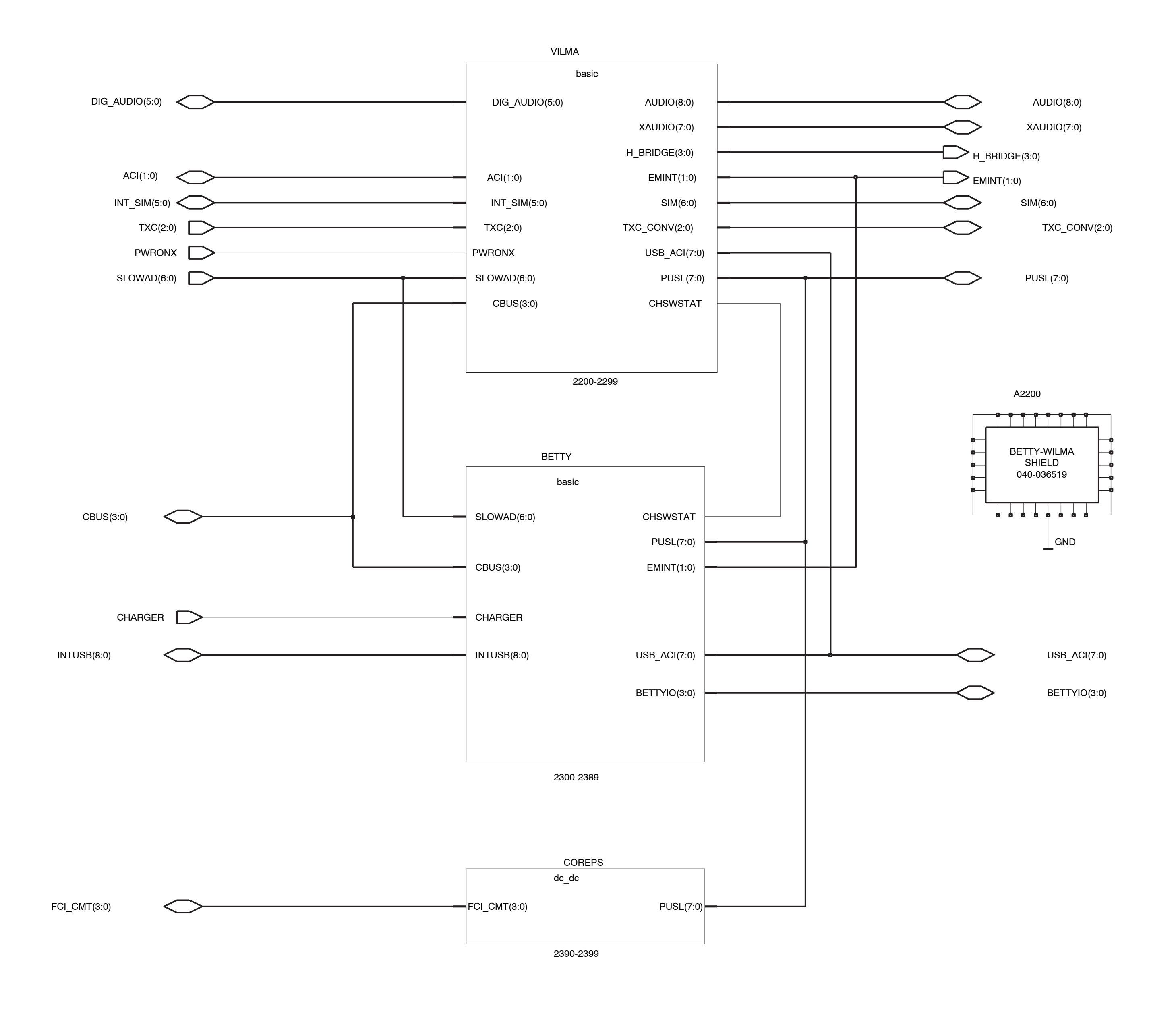


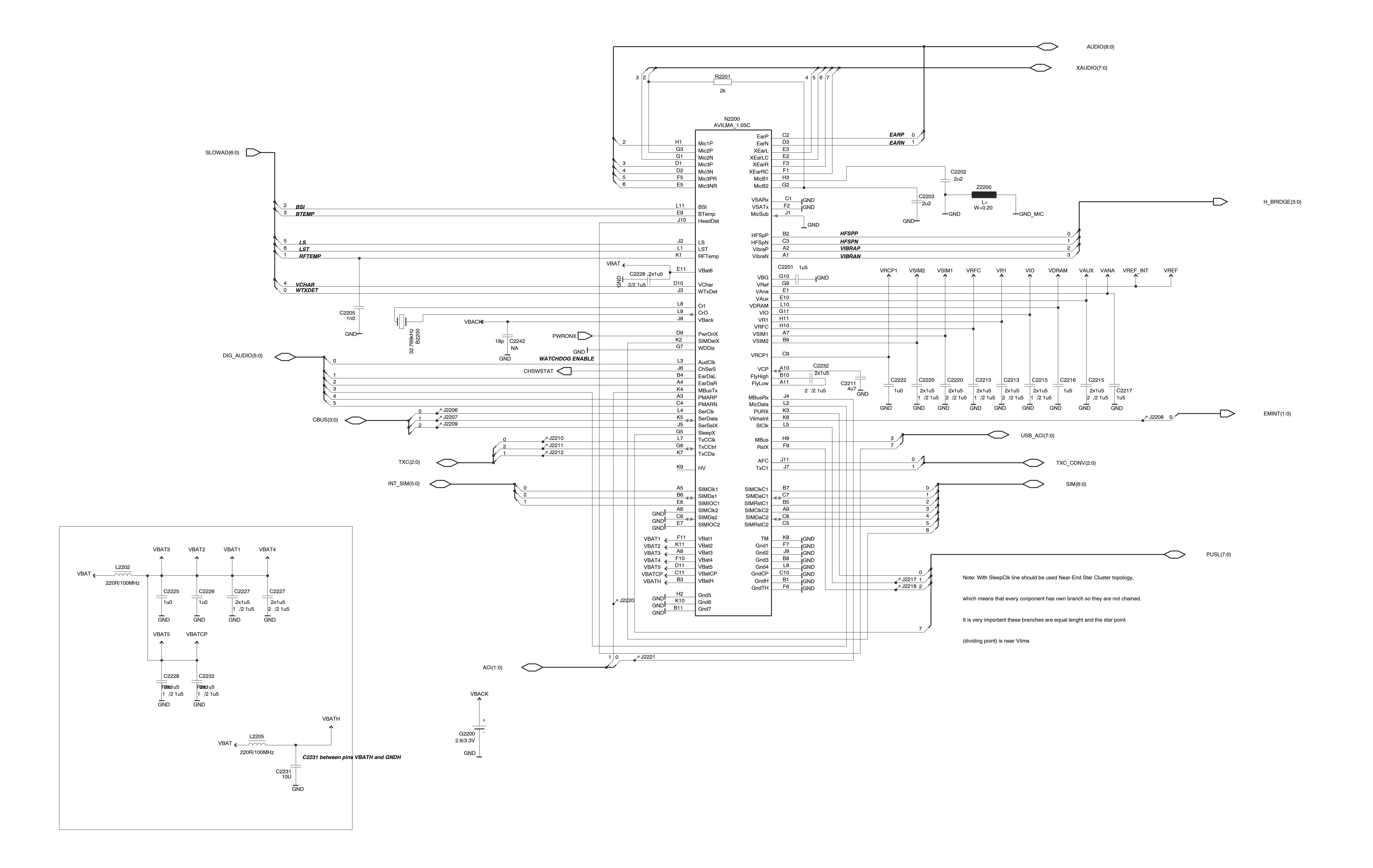




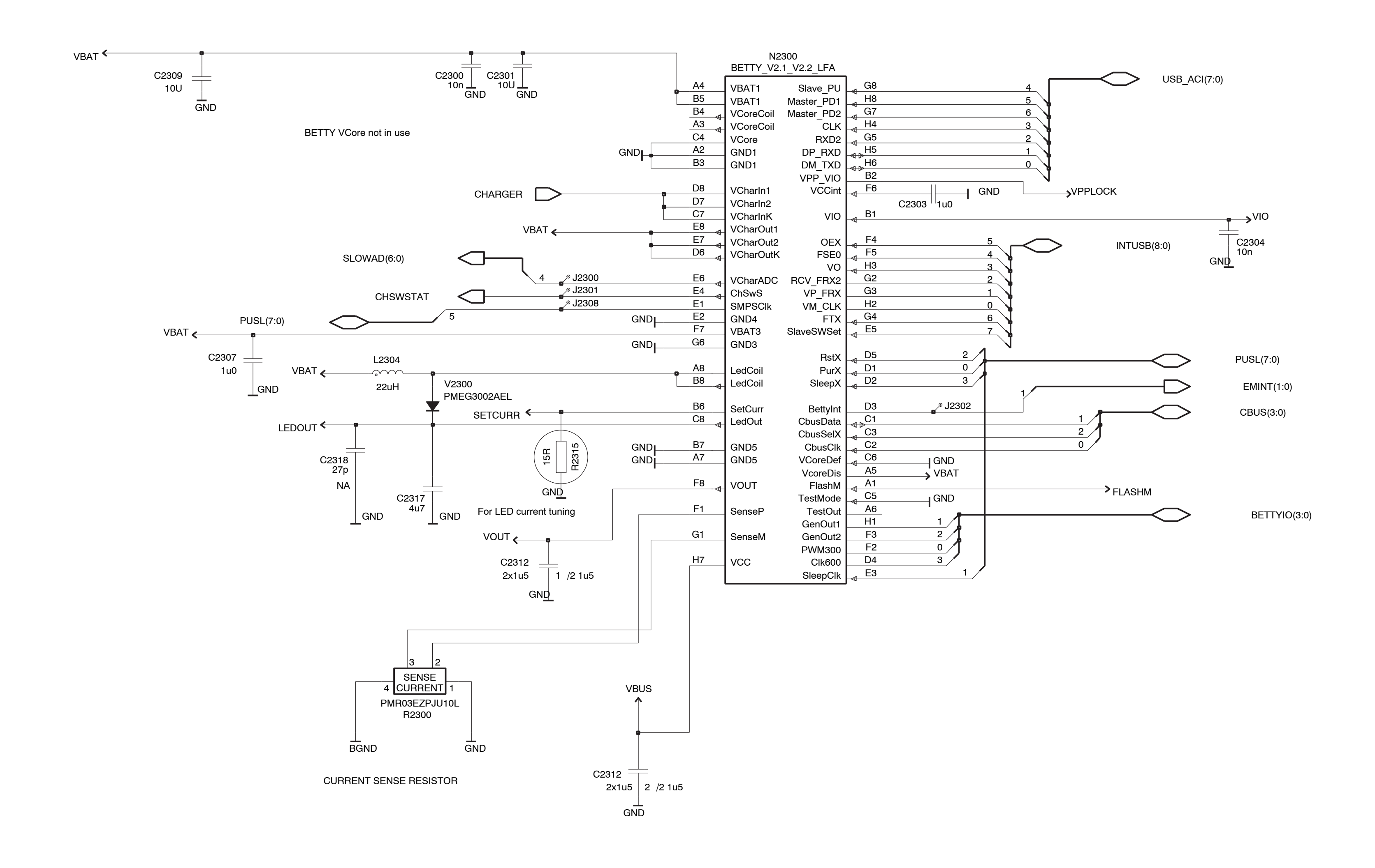


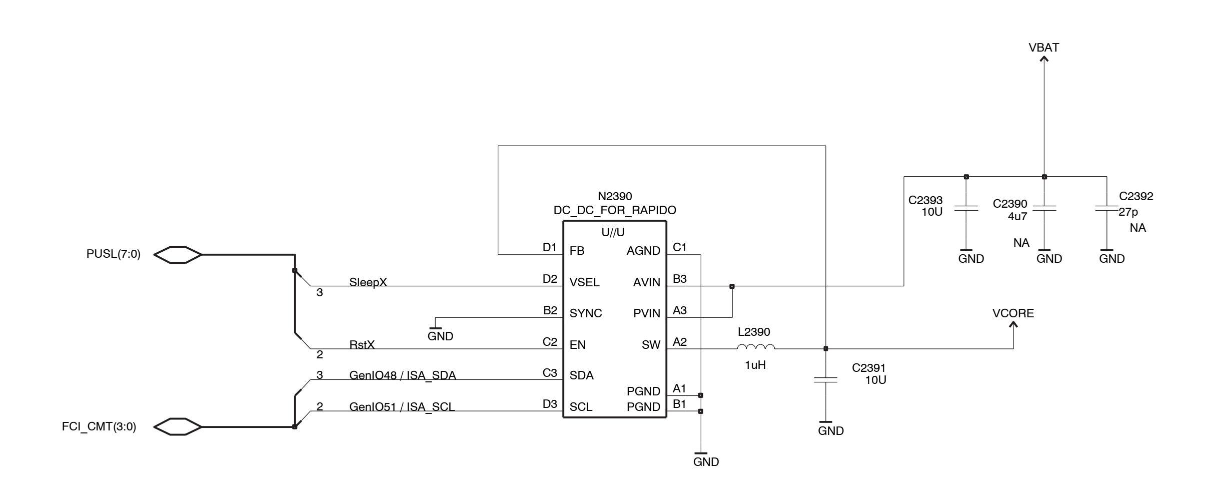

CBB5X
TOP SHEET
RFCLK_I(1:0)
RFCLK(1:0)
LPRFCLK_I
RFClkExt
GPSCLK
RFClkExt
RFCONV_I(11:0)
RFCONV(11:0)
RFCTRL_I(8:0)
RFCTRL(8:0)
TXCCONV_I(2:0)
TXCCONV(2:0)

VBAT
VRCP1
VRCP2
VR1
VREF
0
1
2
3
4
RFPWR(5:0)


VILMA
basic
DIG_AUDIO(5:0)
ACI(1:0)
INT_SIM(5:0)
TXC(2:0)
PWRONX
SLOWAD(6:0)
CBUS(3:0)
AUDIO(8:0)
XAUDIO(7:0)
H_BRIDGE(3:0)
EMINT(1:0)
SIM(6:0)
TXC_CONV(2:0)
USB_ACI(7:0)
PUSL(7:0)
CHSWSTAT
2200-2299
BETTY
basic
SLOWAD(6:0)
CBUS(3:0)
CHARGER
INTUSB(8:0)
CHSWSTAT
PUSL(7:0)
EMINT(1:0)
USB_ACI(7:0)
BETTYIO(3:0)
2300-2389
COREPS
dc_dc
FCI_CMT(3:0)
PUSL(7:0)
2390-2399
A2200
BETTY-WILMA
SHIELD
040-036519
GND

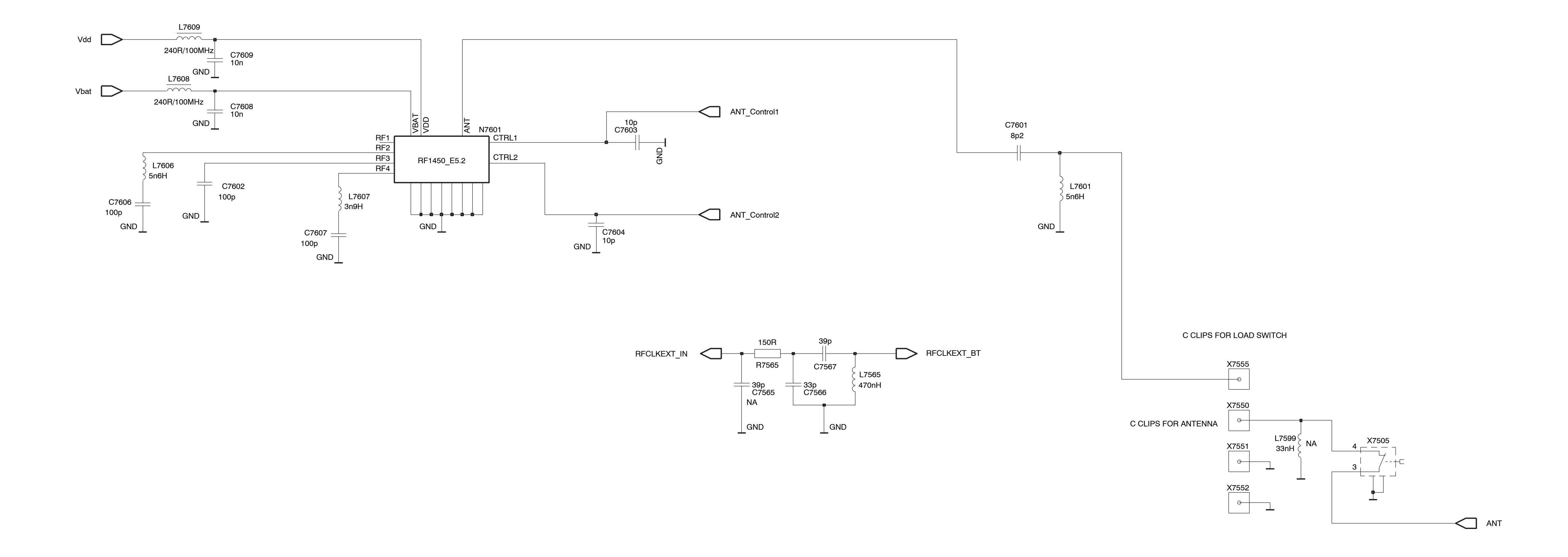


AUDIO(8:0)
XAUDIO(7:0)
R2201
2k
N2200
AVILMA_1.05C
SLOWAD(6:0)
BSI
BTEMP
LS
LST
RFTEMP
VCHAR
WTXDET
EARP
EARN
C2202
2u2
C2203
2u2
Z2200
W=0.20
GND_MIC
H_BRIDGE(3:0)
HFSPP
HFSPN
VIBRAP
VIBRAN
C2201
1u5
VRCP1
VSIM2
VSIM1
VRFC
VR1
VIO
VDRAM
VAUX
VANA
VREF_INT
VREF
VBAT
C2228
2x1u5
C2205
1n0
32.768kHz
B2200
VBACK
C2242
18p
NA
PWRONX
WATCHDOG ENABLE
DIG_AUDIO(5:0)
CHSWSTAT
CBUS(3:0)
TXC(2:0)
INT_SIM(5:0)
C2232
2x1u5
C2211
4u7
EMINT(1:0)
USB_ACI(7:0)
TXC_CONV(2:0)
SIM(6:0)
PUSL(7:0)
ACI(1:0)
VBAT3
VBAT2
VBAT1
VBAT4
L2202
220R/100MHz
C2225
1u0
C2226
1u0
C2227
2x1u5
VBAT5
VBATCP
VBATH
L2205
220R/100MHz
C2231
10U
C2231 between pins VBATH and GNDH
G2200
2.6/3.3V
GND
Note: With SleepClk line should be used Near-End Star Cluster topology,
which means that every conponent has own branch so they are not chained.
It is very important these branches are equal lenght and the star point
(dividing point) is near Vilma

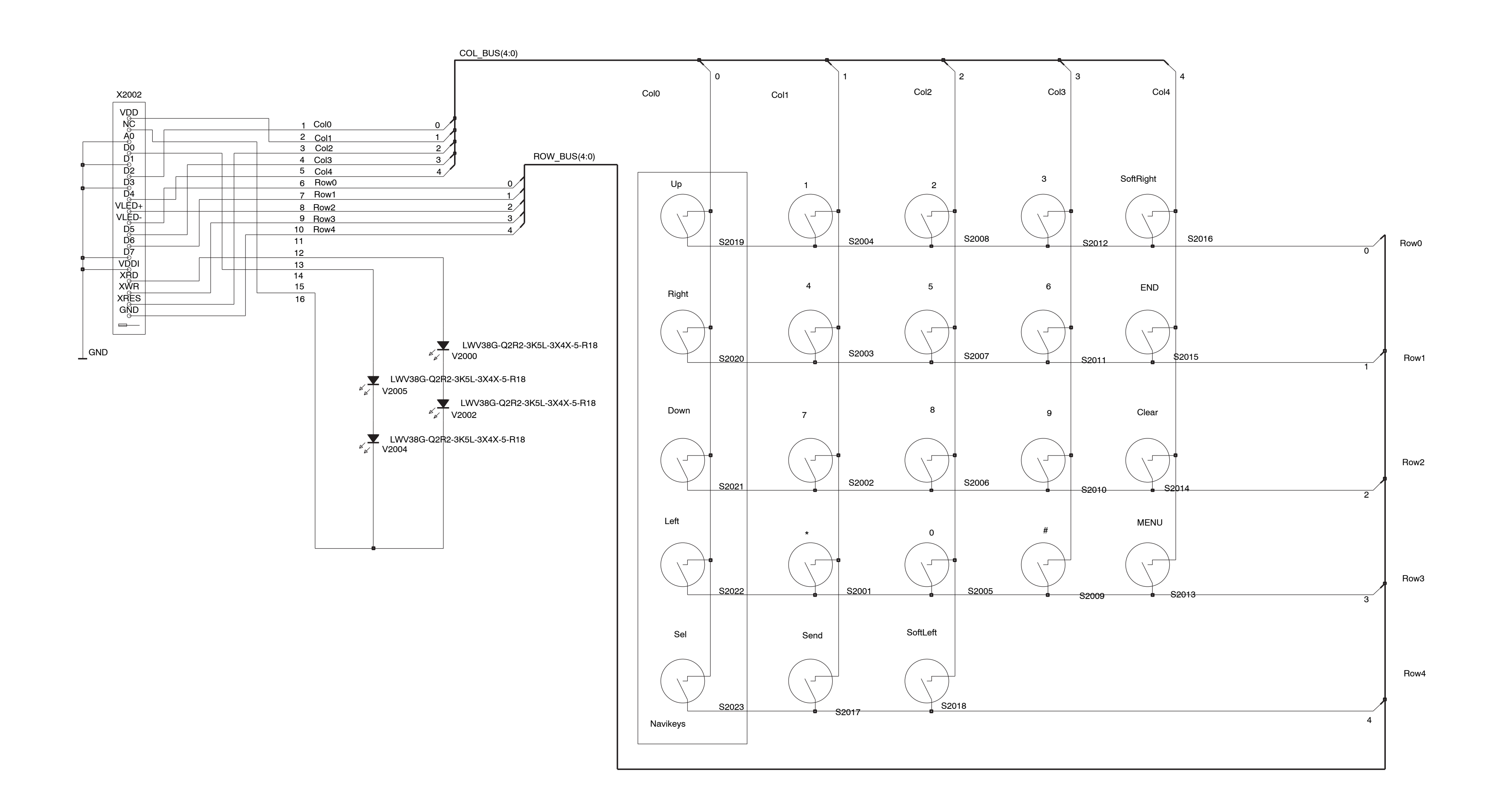

N2300
BETTY_V2.1_V2.2_LFA
VBAT
C2309
10U
C2300
10n
C2301
10U
GND
BETTY VCore not in use
USB_ACI(7:0)
VPPLOCK
CHARGER
VIO
INTUSB(8:0)
SLOWAD(6:0)
CHSWSTAT
PUSL(7:0)
L2304
22uH
V2300
PMEG3002AEL
SETCURR
LEDOUT
EMINT(1:0)
CBUS(3:0)
C2318
27p
NA
C2317
4u7
15R
R2315
For LED current tuning
FLASHM
BETTYIO(3:0)
VOUT
C2312
2x1u5
SENSE
CURRENT
PMR03EZPJU10L
R2300
BGND
VBUS
CURRENT SENSE RESISTOR



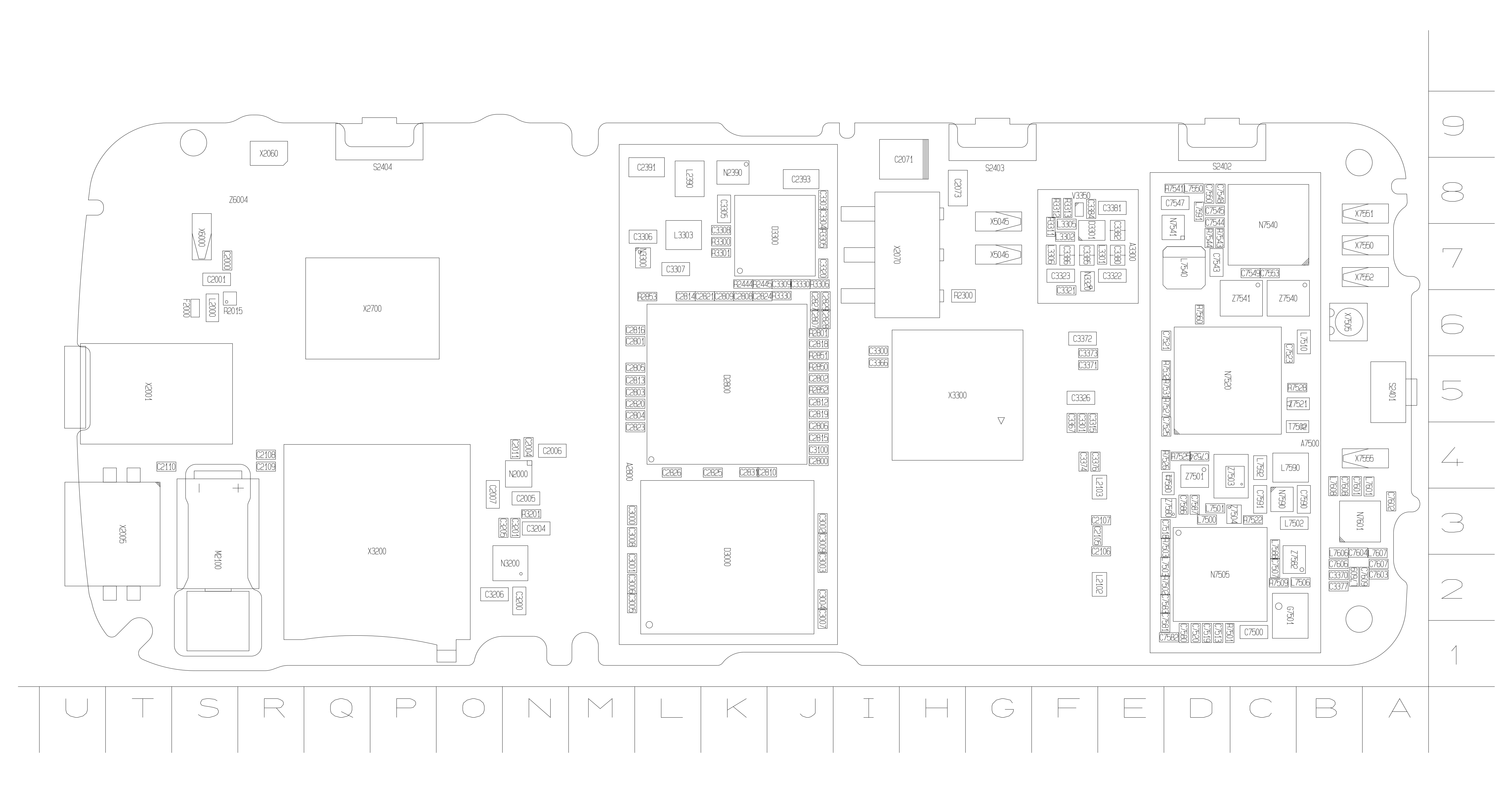
VBAT
N2390
DC_DC_FOR_RAPIDO
U//U
PUSL(7:0)
FCI_CMT(3:0)
SleepX
RstX
GenIO48 / ISA_SDA
GenIO51 / ISA_SCL
3
2
3
2
D1 FB
D2 VSEL
B2 SYNC
C2 EN
C3 SDA
D3 SCL
C1 AGND
B3 AVIN
A3 PVIN
A2 SW
A1 PGND
B1 PGND
GND
L2390
1uH
C2391
10U
VCORE
C2393
10U
C2390
4u7
NA
C2392
27p
NA
GND

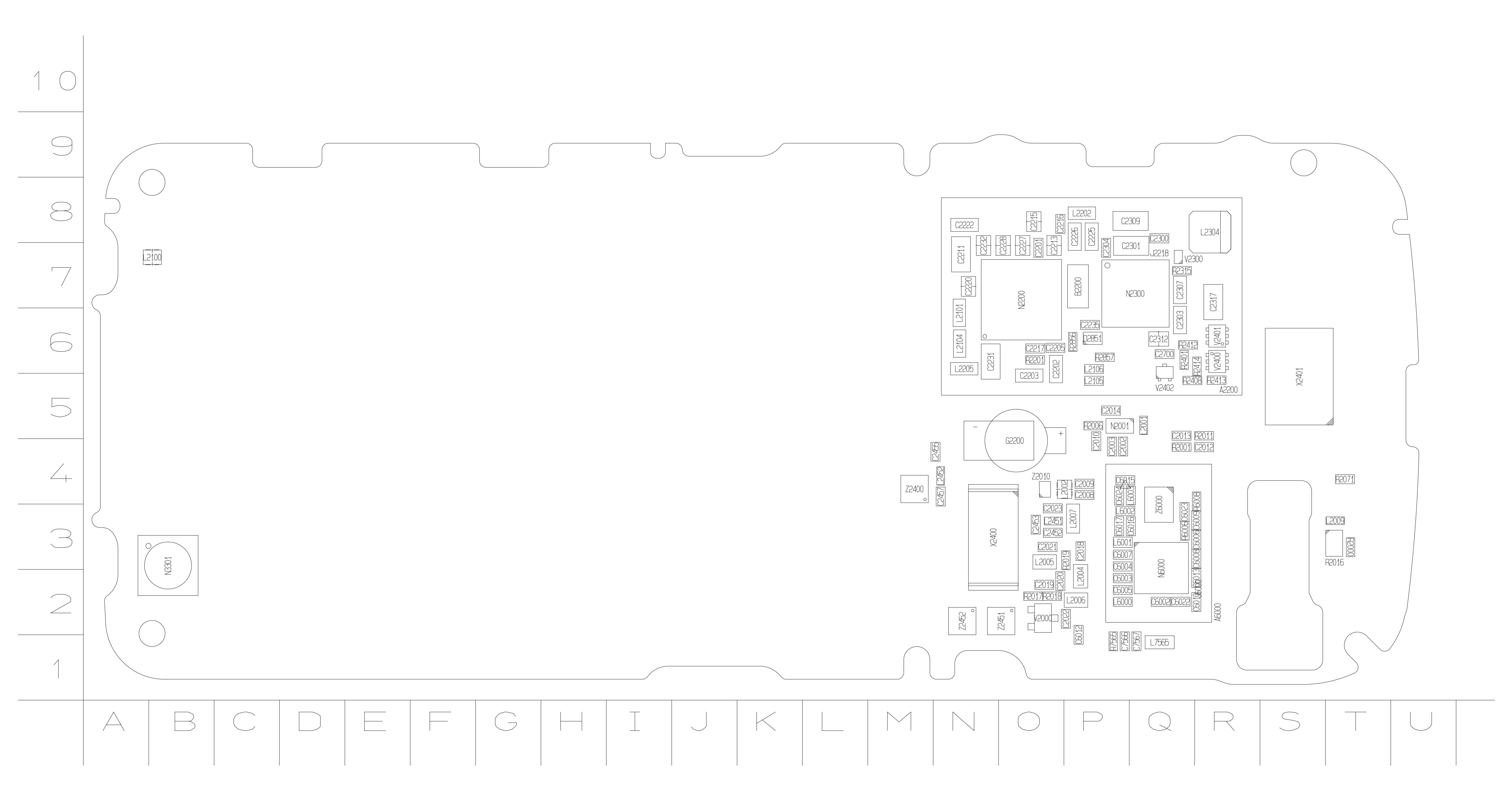


Vdd
L7609
240R/100MHz
C7609
10n
GND
Vbat
L7608
240R/100MHz
C7608
10n
GND
VBAT
VDD
ANT
N7601
RF1
RF2
RF3
RF4
RF1450_E5.2
CTRL1
CTRL2
L7606
5n6H
C7606
100p
GND
C7602
100p
GND
L7607
3n9H
C7607
100p
GND
GND
10p
C7603
GND
ANT_Control1
ANT_Control2
C7604
10p
GND
C7601
8p2
L7601
5n6H
GND
RFCLKEXT_IN
150R
R7565
39p
C7567
RFCLKEXT_BT
39p
C7565
NA
33p
C7566
L7565
470nH
GND
GND
C CLIPS FOR LOAD SWITCH
X7555
X7550
C CLIPS FOR ANTENNA
L7599
33nH
NA
X7505
4
3
X7551
X7552
ANT

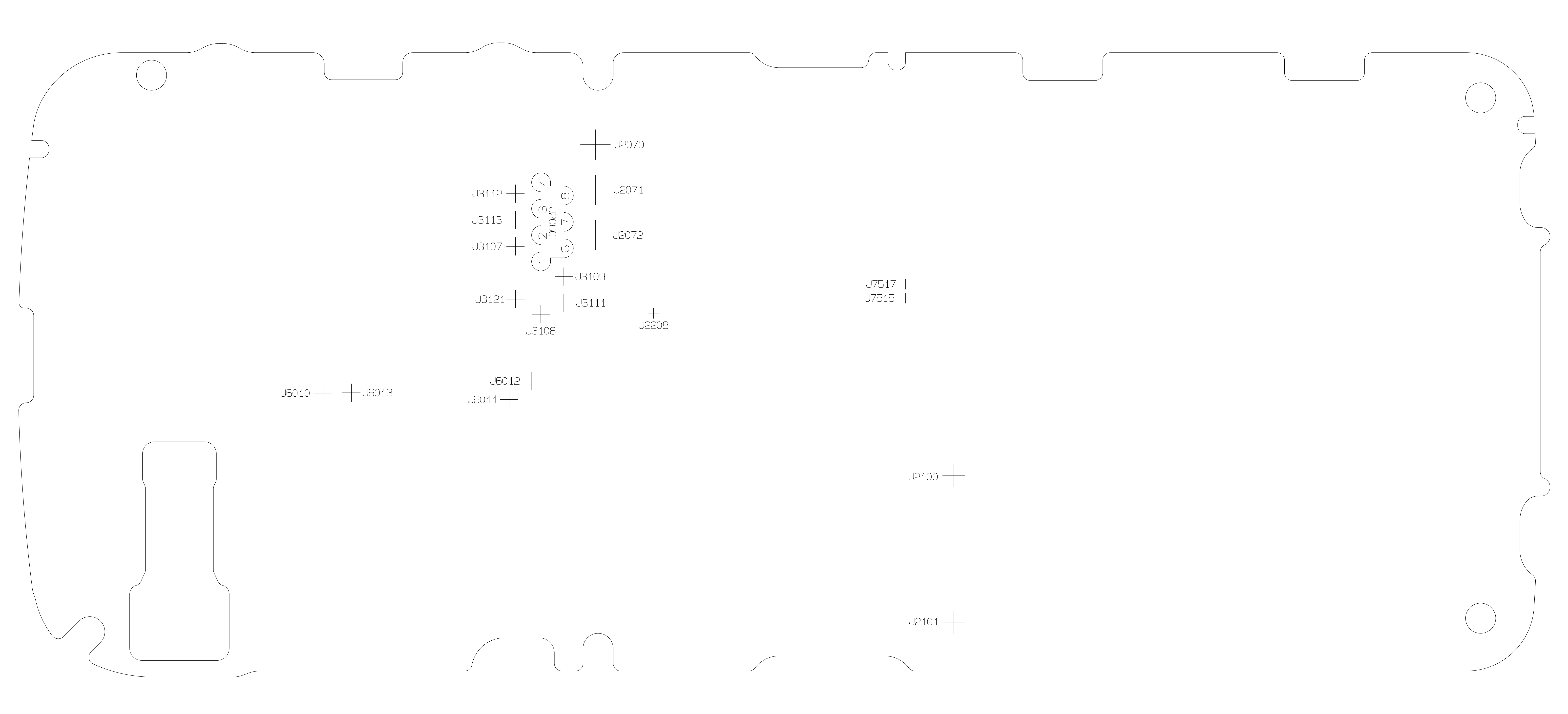


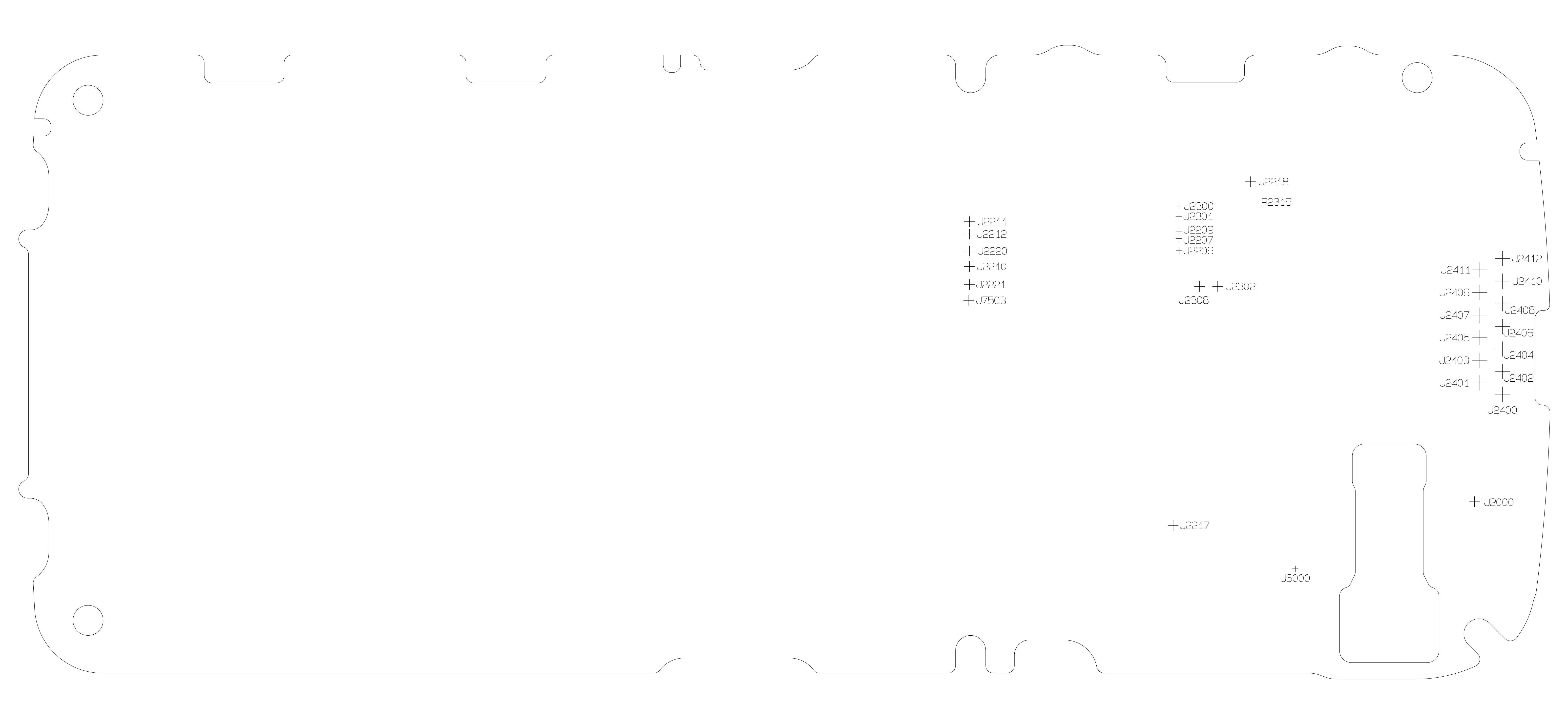
COL_BUS(4:0)
ROW_BUS(4:0)
X2002
VDD
NC
A0
D0
D1
D2
D3
D4
VLED+
VLED-
D5
D6
D7
VDDI
XRD
XWR
XRES
GND
GND
Col0
Col1
Col2
Col3
Col4
Row0
Row1
Row2
Row3
Row4
LWV38G-Q2R2-3K5L-3X4X-5-R18
V2000
V2005
V2002
V2004
Up
Right
Down
Left
Sel
Navikeys
SoftRight
END
Clear
MENU
Send
SoftLeft
S2019
S2020
S2021
S2022
S2023
S2004
S2003
S2002
S2001
S2017
S2008
S2007
S2006
S2005
S2018
S2012
S2011
S2010
S2009
S2016
S2015
S2014
S2013

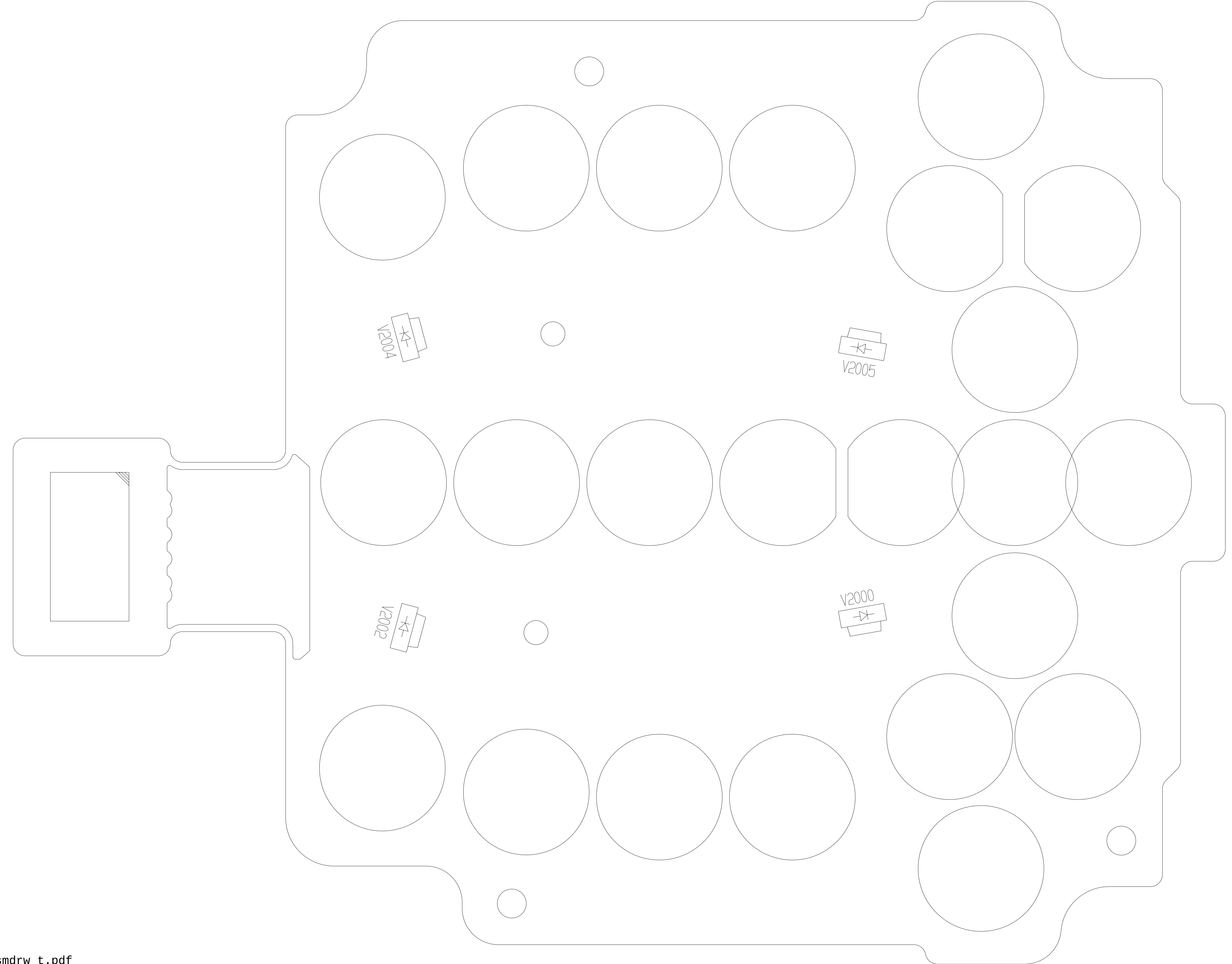

X2060
S2404
Z6004
X6000
C2000
C2001
L2000
R2015
F2000
X2700
X2001
C2110
C2108
C2109
X2005
M2100
X3200
C2011
C2004
C2006
N2000
C2007
C2005
R3201
C3204
N3200
C3206
C3200
C2391
L2390
N2390
C2393
C3305
D3300
C3306
L3303
C3308
R3300
R3301
C3307
R2853
D2800
A2800
D3000
C2071
X2070
C2073
S2403
X5045
X5046
R2300
X3300
C3300
C3366
V3350
A3300
C3381
C3323
C3322
C3321
C3372
C3373
C3371
C3326
L2103
C2107
C2106
L2102
S2402
N7540
N7541
L7540
Z7541
Z7540
N7520
A7500
Z7501
Z7503
L7590
N7590
C7590
L7502
N7505
G7501
C7500
X7551
X7550
X7552
X7505
L7510
S2401
X7555
N7601
U T S R Q P O N M L K J I H G F E D C B A
9 8 7 6 5 4 3 2 1



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J2070
J3112
J2071
J3113
J2060
J3107
J2072
J3109
J7517
J7515
J3121
J3111
J3108
J2208
J6012
J6010
J6013
J6011
J2100
J2101


J2218
R2315
J2300
J2301
J2209
J2207
J2206
J2211
J2212
J2220
J2210
J2221
J7503
J2302
J2308
J2412
J2411
J2410
J2409
J2408
J2407
J2406
J2405
J2404
J2403
J2402
J2401
J2400
J2000
J2217
J6000


V2004
V2005
V2002
V2000